

# LONDON-WEST MIDLANDS ENVIRONMENTAL STATEMENT

Volume 5 | Technical Appendices

CFA1-6 | Euston to Ickenham

Ecological baseline data: amphibians, reptiles and birds

(EC-002-001)

Ecology

November 2013

# LONDON-WEST MIDLANDS ENVIRONMENTAL STATEMENT

Volume 5 | Technical Appendices

CFA1-6 | Euston to Ickenham

Ecological baseline data: amphibians, reptiles and birds (EC-002-001)
Ecology

November 2013



High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

A report prepared for High Speed Two (HS2) Limited.

High Speed Two (HS2) Limited, Eland House, Bressenden Place, London SW1E 5DU

Details of how to obtain further copies are available from HS<sub>2</sub> Ltd.

Telephone: 020 7944 4908

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.hs2.org.uk

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.



# **Contents**

Vol	ume 5: ba	aseline report - EC-002-001	iii				
Ecc	iii						
1	Introdu	uction	1				
2	Amphi	bians	2				
	2.1	Introduction	2				
	2.2	Methodology	2				
	2.3	Deviations, constraints and limitations	2				
	2.4	Baseline	5				
3	Reptile	es	15				
	3.1	Introduction	15				
	3.2	Methodology	15				
	3.3	Deviations, constraints and limitations	15				
	3.4	Baseline	18				
4	Breedi	Breeding birds					
	4.1	Introduction	24				
	4.2	Methodology	24				
	4.3	Deviations, constraints and limitations	31				
	4.4	Baseline	33				
5	Winter	ring and Passage Birds	99				
	5.1	Introduction	99				
	5.2	Methodology	99				
	5.3	Deviations, constraints and limitations	100				
	5.4	Baseline	101				
6	Refere	nces	112				

i

### List of tables

Table 2 Summary of those water bodies located more than 250m from the Proposed Scheme scoped into amphibian assessment  Table 3 Summary of locations where requirement for further survey was scoped out following walkover/HSI survey  Table 4 Summary of results from amphibian presence/absence and population size class estimate surveys  Table 5 Summary of great crested newt metapopulations assumed to occur within the vicinity of the route at CFA1 - 6  Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey  Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sittes at which breeding bird surveys were undertaken in CFA1 to 6 inclusive  Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1  Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 35  Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive  Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive  Table 19: Records of notable wintering birds recorded within Wormwood Scrubs  Table 19: Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 20: Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW through Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 1 Summary of locations where requirement for amphibian survey was identified but no	
Table 3 Summary of locations where requirement for further survey was scoped out following walkover/HSI survey  Table 4 Summary of results from amphibian presence/absence and population size class estimate surveys  Table 5 Summary of great crested newt metapopulations assumed to occur within the vicinity of the route at CFA1 - 6  Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey  Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive2  Table 9 Summary of breeding bird survey locations where no access available for survey  Table 9 Summary of rotable bird records from field surveys undertaken in CFA1  Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 32  Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 15 Summary of wintering/passage bird field surveys undertaken in CFA4  Table 16 Summary of wintering/passage bird field surveys undertaken in CFA4  Table 16 Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive  Table 17 Records of notable wintering birds recorded within Wormwood Scrubs  Table 19 Records of notable wintering birds recorded within Wormwood Scrubs  Table 19 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW through Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	access was available for survey	2
Table 3 Summary of locations where requirement for further survey was scoped out following walkover/HSI survey  Table 4 Summary of results from amphibian presence/absence and population size class estimate surveys  Table 5 Summary of great crested newt metapopulations assumed to occur within the vicinity of the route at CFA1 - 6  Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey  Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive  Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 at Table 11 Protected and/or notable bird records from field surveys undertaken in CFA4 and CFA3 at Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 14 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 15: Summary of wintering/passage bird field surveys undertaken in CFA4 to 6 inclusive  Table 16: Summary of wintering/passage bird field surveys undertaken in CFA4 to 6 inclusive  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs  Table 19: Records of notable wintering birds recorded within Wormwood Scrubs  Table 19: Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 20: Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW through Ruislip at Breakspear Road South  Totale 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 2 Summary of those water bodies located more than 250m from the Proposed Scheme	
Walkover/HSI survey Table 4 Summary of results from amphibian presence/absence and population size class estimate surveys  Table 5 Summary of great crested newt metapopulations assumed to occur within the vicinity of the route at CFA1 - 6  Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey  Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive 22  Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1  Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 at Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 14 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 15: Summary of wintering/passage bird field surveys undertaken in CFA4 to 6 inclusive  Table 16: Summary of wintering/passage bird field surveys undertaken in CFA4 to 6 inclusive  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs  Table 18 Records of notable wintering birds recorded within Perivale Wood  Table 19 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 22: Records of notable wintering birds recorded along PRoW through Lord Halsbury	scoped into amphibian assessment	6
Table 4 Summary of results from amphibian presence/absence and population size class estimate surveys  Table 5 Summary of great crested newt metapopulations assumed to occur within the vicinity of the route at CFA1 - 6  Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey  Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive  Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1  Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 and C	Table 3 Summary of locations where requirement for further survey was scoped out following	
Table 5 Summary of great crested newt metapopulations assumed to occur within the vicinity of the route at CFA1 - 6 Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive Table 9 Summary of breeding bird survey locations where no access available for survey Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1 Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 at Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4 Table 13 Protected and/or notable bird records from field surveys undertaken in CFA4 Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 17: Records of notable wintering birds recorded within Wormwood Scrubs Table 18 Records of notable wintering birds recorded within Perivale Wood Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 22: Records of notable wintering birds recorded along PRoW through Ruislip at	walkover/HSI survey	6
Table 5 Summary of great crested newt metapopulations assumed to occur within the vicinity of the route at CFA1 - 6  Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey  Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive  Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1  Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 35  Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5  Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6  Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive  Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs  Table 18 Records of notable wintering birds recorded within Perivale Wood  Table 19 Records of notable wintering birds recorded along PROW through Islip Manor Nature  Reserve  Table 20 Records of notable wintering birds recorded along PROW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PROW around West Ruislip at Breakspear Road South	Table 4 Summary of results from amphibian presence/absence and population size class estim	ıate
the route at CFA1 - 6 Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive Table 9 Summary of breeding bird survey locations where no access available for survey Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1 Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4 Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive Table 17: Records of notable wintering birds recorded within Wormwood Scrubs Table 18 Records of notable wintering birds recorded within Perivale Wood Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South Totale 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 102 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 102	surveys	8
Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey  Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive 22 Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1 34 Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 35 Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4 37 Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 45 Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 54 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive 10 Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive 10 Table 17: Records of notable wintering birds recorded within Wormwood Scrubs 10 Table 19 Records of notable wintering birds recorded within Perivale Wood 10 Table 19 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field 10 Table 21: Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field 10 Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South 10 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 100 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 100 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 100 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 100 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 100 Table 22: Records of n	Table 5 Summary of great crested newt metapopulations assumed to occur within the vicinity	of
Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive 22  Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1  Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 38  Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5  Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6  Table 15 Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive  Table 16: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs  Table 18 Records of notable wintering birds recorded within Perivale Wood  Table 19 Records of notable wintering birds recorded along PROW through Islip Manor Nature  Reserve  Table 20 Records of notable wintering birds recorded along PROW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PROW around West Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PROW through Ruislip golf course 100  Table 22: Records of notable wintering birds recorded along PROW through Ruislip golf course 100	the route at CFA1 - 6	13
Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive  Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive 22  Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1 34  Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 35  Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4 37  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 49  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA6 49  Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 59  Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive 99  Table 16: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive 99  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs 102  Table 18 Records of notable wintering birds recorded within Perivale Wood 104  Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature 105  Reserve 105  Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury 106  Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at 107  Table 22: Records of notable wintering birds recorded along PRoW around West Ruislip at 107  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 107  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 107	Table 6 Summary of locations where requirement for reptile survey identified but no access	
Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive 22 Table 9 Summary of breeding bird survey locations where no access available for survey  Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1 34 Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 35 Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4 37 Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 45 Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 54 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive Table 17: Records of notable wintering birds recorded within Wormwood Scrubs 102 Table 19 Records of notable wintering birds recorded within Perivale Wood 104 Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve 105 Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field 106 Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South 107 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105 Table 22: Records of notable	available for survey	15
Table 9 Summary of breeding bird survey locations where no access available for survey Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1 Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 35 Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4 Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive Table 17: Records of notable wintering birds recorded within Wormwood Scrubs Table 18 Records of notable wintering birds recorded within Perivale Wood Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive	19
Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1  Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 35  Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4  Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5  Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6  Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive  Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs  Table 18 Records of notable wintering birds recorded within Perivale Wood  Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature  Reserve  Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusiv	ve 24
Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3 35 Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4 Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs Table 18 Records of notable wintering birds recorded within Perivale Wood Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South  107 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 109 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 109	Table 9 Summary of breeding bird survey locations where no access available for survey	33
Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4 Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive Table 17: Records of notable wintering birds recorded within Wormwood Scrubs Table 18 Records of notable wintering birds recorded within Perivale Wood Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South  107 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 109		34
Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5 Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive Table 17: Records of notable wintering birds recorded within Wormwood Scrubs Table 18 Records of notable wintering birds recorded within Perivale Wood Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA	<del>\</del> 335
Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6 Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive Table 17: Records of notable wintering birds recorded within Wormwood Scrubs Table 18 Records of notable wintering birds recorded within Perivale Wood Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4	37
Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive Table 17: Records of notable wintering birds recorded within Wormwood Scrubs Table 18 Records of notable wintering birds recorded within Perivale Wood Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 13 Protected and/or notable bird records from field surveys undertaken in CFA5	49
Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs  Table 18 Records of notable wintering birds recorded within Perivale Wood  Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature  Reserve  Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6	54
survey in CFA 1 to 6 inclusive  Table 17: Records of notable wintering birds recorded within Wormwood Scrubs  Table 18 Records of notable wintering birds recorded within Perivale Wood  Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature  Reserve  Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive	99
Table 17: Records of notable wintering birds recorded within Wormwood Scrubs  Table 18 Records of notable wintering birds recorded within Perivale Wood  Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature  Reserve  Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 16: Summary of wintering/passage bird survey locations where no access available for	
Table 18 Records of notable wintering birds recorded within Perivale Wood  Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature  Reserve  Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	survey in CFA 1 to 6 inclusive	101
Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve 105 Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field 106 Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South 107 Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 17: Records of notable wintering birds recorded within Wormwood Scrubs	102
Reserve Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 18 Records of notable wintering birds recorded within Perivale Wood	104
Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury  Memorial Playing Field  Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at  Breakspear Road South  Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature	
Memorial Playing Field Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 109	Reserve	105
Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 109	Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury	
Breakspear Road South Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 109	Memorial Playing Field	106
Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course 105	Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at	
	•	107
Table 23: Records of notable wintering birds recorded along PRoW through Copthall farm 110		: 109
	Table 23: Records of notable wintering birds recorded along PRoW through Copthall farm	110

Volume 5: baseline report - EC-002-001

Ecological baseline data (CFA 1-6)
Amphibians, reptiles and birds

# 1 Introduction

- 1.1.1 This document is an appendix which forms part of Volume 5 of the environmental statement (ES) for the Proposed Scheme. It details ecological baseline data collected for the following ecological aspects and species:
  - Amphibians;
  - Reptiles;
  - · Breeding birds; and
  - Wintering and passage birds.
- 1.1.2 The ecological baseline data detailed within this document relates to community forum areas (CFA):
  - CFA1: Euston Station and approach;
  - CFA2: Camden Town and HS1 Link;
  - CFA3: Primrose Hill to Kilburn;
  - CFA4: Kilburn (Brent) to Old Oak Common;
  - CFA5: Northolt Corridor; and
  - CFA6: South Ruislip to Ickenham.
- 1.1.3 The document should be read in conjunction with Volume 2 (community forum area reports), Volume 3 (route wide effects assessment) and Volume 4 (off-route effects assessment).

# 2 Amphibians

### 2.1 Introduction

This section of the appendix presents details of baseline information relating to amphibians for the section of the Proposed Scheme that will pass through Community Forum Areas (CFA) 1 to 6.

# 2.2 Methodology

- Details of the standard methodology utilised for amphibian surveys are provided in the Scope and Methodology Report Addendum (Volume 5: Appendix CT-001-000/2).
- 2.2.2 Existing amphibian records were provided by Greenspace Information for Greater London (GiGL)<sup>1</sup>.

## 2.3 Deviations, constraints and limitations

- 2.3.1 The main constraint to the surveys was the lack of access to a number of ponds that were scoped into the assessment. Scheme design changes meant further ponds were added to the scope of the assessment following the 2013 pond survey window.
- The main constraint to the implementation of the method was the cold weather, which limited the ability to commence survey in March, or deploy bottle traps on some nights. Nonetheless at least three methods were used at each pond on each visit, except at Copthall Farm where the ponds and ditch dried out early during the survey season.
- 2.3.3 Conclusions have been drawn using professional opinion based on available information, with any assumptions taking a precautionary approach. Details of those sites which required further survey, but which could not be accessed, plus the ponds added later to the scope of the assessment as described above, are presented in Table 1.

Table 1 Summary of locations where requirement for amphibian survey was identified but no access was available for survey

Ecology survey code	Location	OS grid reference	Initial survey prescription based on scoping exercise	CFA number	Approximate distance from the Proposed Scheme (m) and orientation
010-AH1- 002001	Adelaide Local Nature Reserve (LNR)	TQ276 842	Habitat Suitability Index (HSI) + Presence/Absence. No access permitted and not visible from Public Right of Way (PRoW). Desk study indicates while smooth newts are present, great crested newts are unlikely to be recorded.	3	30m west
010-AH1- 002002	Adelaide Local Nature Reserve (LNR)	TQ276 842	Habitat Suitability Index (HSI) + Presence/Absence. No access permitted and not visible from Public Right of Way (PRoW). Desk study	3	4om south

<sup>1</sup> http://www.gigl.org.uk/

Ecology survey code	Location	OS grid reference	Initial survey prescription based on scoping exercise	CFA number	Approximate distance from the Proposed Scheme (m) and orientation
			indicates while smooth newts are present, great crested newts are unlikely to be recorded.		
010-AH1- 008001	Drain alongside Linford Christie Stadium	TQ224 814	HSI + presence/absence. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	4	5om east
010-AH1- 011007	Pond on east side of Abbey Road	TQ196 834	HSI + presence/absence. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	5	300m south
010-AH1- 011001 to 010- AH1-011006, 010-AH1- 011008 and 010-AH1- 011009	Park Royal Ponds	TQ191 825 - TQ190 828	HSI + presence/absence. Access permitted for HSI only.	5	70m north to 260m north
010-AH1- 014006	Ditch north of Tavistock Avenue	TQ164 832	HSI + presence/absence. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	5	Within Proposed Scheme
010-AH1- 016001, 010- AH1-016002 and 010-AH1- 016007	Ponds on east side of A4127 Greenford Road	TQ151840 - TQ151841	HSI + presence/absence. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	5	8om-10om north
010-AH1- 017001 and 010-AH1- 017004	London Canal's Site of Metropolitan Importance (SMI) South of Carr Road, Greenford	TQ142 842 - TQ140 842	HSI + presence/absence. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	5	Within Proposed Scheme and 20m north
010-AH1- 019001, 010- AH1-019002 and 010-AH1- 019003	Islip Manor, Ealing	TQ119 843 - TQ118 846 and TQ115 844	HSI+ population size class assessment. Access for HSI only.	5	57om south, 34om south, 59om south
010-AH1- 016003	Pond within Southall Park	TQ131 801	HSI + presence/absence. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	5	130m north
010-AH1- 017002	Ditch within Whittle Road Park Site of Local Importance (SLI), Ealing	TQ133 795	HSI + presence/absence. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	5	150m south

Ecology survey code	Location	OS grid reference	Initial survey prescription based on scoping exercise	CFA number	Approximate distance from the Proposed Scheme (m) and orientation
010-AH1- 019004	Islip Manor SMI, Ealing	TQ120 848	HSI+ population size class assessment. No access and not visible from PRoW.	6	8om south
010-AH1- 021002	Ditch on newly developed site N of Northolt Aerodrome	TQ100 856	HSI + presence/absence. No access and not visible from PRoW.	6	150m south-west
010-AH1- 021001	Ruislip Gardens Recreation Ground	TQ103 860	HSI+ population size class assessment. HSI from PRoW only.	6	150m east
010-AH1- 023001	Ruislip Golf Course	TQ081869	HSI+ population size class assessment. HSI from PRoW only.	6	Within Proposed Scheme
010-AH1- 023004	Ruislip Golf Course	TQ080, 870	HSI+ population size class assessment. HSI from PRoW only.	6	Within Proposed Scheme
010-AH1- 023002	Ruislip Golf Course	TQ079 872	HSI+ population size class assessment. HSI from PRoW only.	6	20m north-east
010-AH1- 024004	Ruislip Golf Course	TQ074871	HSI+ population size class assessment. HSI from PRoW only.	6	Within Proposed Scheme
010-AH1- 024011	Moat adjacent to River Pinn	TQ072 867	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	16om south
010-AH1- 024009 010- AH1-024010	Brackenbury Farm	TQ069 872 TQ069 872	HSI+ population size class assessment. No access and not visible from PRoW.	6	Adjacent to the Proposed Scheme
010-AH1- 024006	Brackenbury Farm (moat)	TQ070 870	HSI+ population size class assessment. No access and not visible from PRoW.	6	6om west
010-AH1- 024008 010- AH1-024028	Pharmaceutical research facility	TQ069 872 TQ068, 873	HSI+ population size class assessment. No access and not visible from PRoW.	6	Within Proposed Scheme
010-AH1- 025008	Pond north of Newyears Green Lane	TQ063 884	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	150m north
010-AH1- 025001, 010- AH1-025002	Ponds at Newyears Green Waste Transfer Plant.	TQ069 879 - TQ068 880	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	40m-140m east
010-AH1- 024012	Pond to south of Fine Bush Lane, east of Breakspear Road North	TQ075 884	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	4om east
010-AH1- 024013, 010- AH1-024014 and 010-AH1-	Ponds immediately north of St Leonard's Farm	TQ073 884, TQ071 883 and TQ070	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the	6	Within Proposed Scheme

Ecology survey code	Location	OS grid reference	Initial survey prescription based on scoping exercise	CFA number	Approximate distance from the Proposed Scheme (m) and orientation
025003		883	time of the survey window.		
010-AH1- 025004, 010- AH1-025005, 010-AH1- 025008, 010- AH1-026003	Ponds immediately south and east of Bayhurst Wood and north of Newyears Green Lane.	TQ068 884, TQ065 886, TQ063 884, TQ062 886	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	90m-250m away
010-AH1- 026004, 010- AH1-026005	Northwest corner of Bayhurst Wood Nature Reserve	TQ065 893 - TQ065 892	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	Adjacent + 230m south-east
010-AH1- 025006, 010- AH1-025007, 010-AH1- 024015	North of St Leonard's Farm	TQ072 888 - TQ074 887	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	130m-220m north
010-AH1- 024016	Rose Farm House Pond west of Breakspear Road North	TQ074 885	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	10m north
010-AH1- 024017	Oak Cottage Pond	TQ075 884	HSI+ population size class assessment. Access not requested as not within 500m of the Proposed Scheme at the time of the survey window.	6	10m east

## 2.4 Baseline

## **Scoping**

- An initial scoping exercise assessed the likelihood of impacts on all water bodies within a 500m radius of the outer edge of the land required for the construction of the Proposed Scheme. However, for the vast majority of the alignment, habitat losses associated with ponds located more than 250m from the outer edge of the land required for the construction of the Proposed Scheme are considered unlikely to result in significant adverse effects and hence those ponds were not normally scoped in for further survey.
- 2.4.2 Water bodies occurring more than 250m from the Proposed Scheme were only scoped into the assessment where:
  - the terrestrial habitat around the ponds within 250m appeared to be of poor value for great crested newts, and there were connections to areas of more suitable terrestrial habitat beyond 250m;
  - the Proposed Scheme had the potential to fragment connectivity between ponds

- and metapopulations through loss of terrestrial habitat; or
- the pond is part of a cluster of connected ponds, some of which are within 250m of the land required for the Proposed Scheme, and therefore should be surveyed alongside these others in order to better estimate the metapopulation.
- 2.4.3 Table 2 summarises the rationale for those ponds located more than 250m from the Proposed Scheme which were scoped into the assessment.

Table 2 Summary of those water bodies located more than 250m from the Proposed Scheme scoped into amphibian assessment

Ecology survey code	Location	OS centroid grid reference	Brief rationale for scoping in	CFA number	Approximate distance from the Proposed Scheme (m) and orientation
010-AH1- 011007	East of Abbey Road	TQ196 834	Significant areas of accessible terrestrial habitat of equal or more suitability were not available closer to the pond, such that land required for the construction of the Proposed Scheme may be used as terrestrial habitat by great crested newts.	5	300m south
010-AH1- 011006	Park Royal, Ealing	TQ190 828	For the purpose of surveying the whole metapopulation; this pond is adjacent to and connected to ponds within 250m.	5	26om north
010-AH1- 019001 and 010-AH1- 019003	Islip Manor, Ealing	TQ119 843 and TQ115 844	For the purpose of surveying the whole metapopulation; this pond is adjacent to and connected to ponds within 250m being affected.	5	570m south, 340m south, 590m south

## Field survey

### HSI/walkover

2.4.4 Following the completion of walkover surveys, incorporating a Habitat Suitability Index (HSI) survey where appropriate, the water bodies identified in Table 3 below were scoped out of the assessment.

Table 3 Summary of locations where requirement for further survey was scoped out following walkover/HSI survey

Ecology survey code	Location	OS centroid grid reference	Brief rationale for scoping out	CFA number	Approximate distance from the Proposed Scheme (m) and orientation
010-AH1- 015001	Drain at Ealing Central Sports Ground	TQ159 831	The ditch was noticeably flowing.	5	28om south
010-AH1- 024027	Dunster Cottage, Breakspear Road South	TQ074 873	The waterbody comprises a small disused swimming pool with steep sides and little aquatic vegetation.	6	6m northwest

# Presence/absence and population size class estimate surveys

2.4.5 The results of presence/absence and population size class estimate surveys are detailed within Table 4.

# Appendix EC-002-001

Table 4 Summary of results from amphibian presence/absence and population size class estimate surveys

Ecology	Location	os	Survey	No. of	First	Last	Peak coun	t during single	visit with sin	gle method		CFA No.	Approximate
survey code		Centroid Grid Reference	type	visits completed	survey visit	survey visit	Great crested newt	Smooth newt	Palmate newt	Common frog	Common		distance from the Proposed Scheme (m) and orientation
010-AA1- 015002	Perivale Wood	TQ160 835	presence/ absence	4 (1)	17 April 2013	21 May 2013	0	2 (L)	0	0	0	5	150m north- west
010-AA1- 015003	Perivale Wood	TQ158 835	presence/ absence	4 (1)	17 April 2013	21 May 2013	0	11 (G)	0	0	0	5	Adjacent
010-AA1- 015004	Perivale Wood	TQ158 835	presence/ absence	4 (1)	17 April 2013	21 May 2013	0	48 (G)	0	0	0	5	Adjacent
010-AA1- 024003	Ickenham Pumping Station	TQ073 875	presence/ absence	4(3)	18 April 2013	21 May 2013	0	0	0	0	1	6	6om north
010-AA1- 026001	Highway Farm (east pond)	TQ061880	presence/ absence	4(2)	18 April 2013	21 May 2013	0	2 (L)	0	Tadpoles	1 (L)	6	4om north- east
010-AA1- 025002	Highway Farm (west pond)	TQ060 880	presence/ absence	4(2)	18 April 2013	21 May 2013	0	1 (L)	0	0	Toad spawn	6	10m north- east
010-AA1- 024001	Copthall Fm (pond + ditch on roadside)	TQ069 866	presence/ absence	4(1)	18 April 2013	21 May 2013	0	0	0	0	0	6	Within Proposed Scheme
010-AA1- 024002	Copthall Fm (western	TQ068 896	presence/ absence	4 (1)	18 April 2013	21 May 2013	0	0	0	0	0	6	Within Proposed Scheme

Ecology Locati	on OS	Survey	No. of	First	Last	Peak count during single visit with single method				CFA No.	Approximate	
most pond)												

#### Key:

Bracketed number within No. of visits completed column indicates the number of visits that did not meet the required standard conditions for bottle trapping as defined by great crested newt (GCN) mitigation guidelines<sup>2</sup>. On these occasions either netting, or refugia searches, or both were carried out in preference.

Bracketed text within species column indicates the relevant population size class for the peak count obtained as follows:

Great crested newt - (H) = High; (M) = Medium; (L) = Low

Smooth and palmate newt = peak count less than 10 = Low (L); peak count 10-100 = Good (G); peak count over 100 = Exceptional (E)

Common frog = spawn clumps counted less than 50 = Low (L); 50-500 = Good (G); greater than 500 = Exceptional (E)

Common toad = peak count of less than 100 = Low (L); peak count 100-1000 = Good (G); peak count greater than 1000 = Exceptional (E)

N.B. a full six visits are required in order to obtain a robust population size class assessment. However, an indication of the corresponding size class category is shown here for all peak counts in order to show the minimum size class known to be present at those sites where the full six visits could not be completed during the time period available for survey.

2.4.6 All evening torching surveys were carried out when the air temperature was above 5°C. On the occasions where the weather forecast predicted a minimum night time temperature of below 5°C (based on internet meteorological data), bottle trapping was not carried out and netting was carried out instead. For the two ponds at Highway Farm, netting was carried out instead of bottle trapping on each of the four visits as these ponds were lined and therefore the standard bottle trapping methodology was not possible. The ponds at Copthall Farm were completely dried by the third visit.

<sup>&</sup>lt;sup>2</sup> Great Crested New Mitigation Guidelines, English Nature 2001.

### **Desk study**

CFA1 Euston Station and approach, CFA2 Camden Town, CFA3 Primrose Hill to Kilburn (Camden) and CFA4 Kilburn (Brent) to Old Oak Common

There were no records of great crested newts and no significant records of other common amphibian species returned for CFA1, 2 and 4. There were no records of great crested newts returned for CFA3. Within CFA3, the Adelaide LNR citation and Management Plan³, reports the presence of two small ponds, 30m west and 40m south of the land required for the Proposed Scheme. Grassland, scrub and trees within the site provide potentially suitable habitat for amphibians including great crested newt. However, the Management Plan reports the presence of smooth newts and common toad in the pond, with no mention of great crested newt. The presence of great crested newts is therefore considered unlikely.

### CFA<sub>5</sub> Northolt Corridor

- 2.4.8 Records of common toad have been returned for the reedbeds south of Carr Road, Ealing, within 10m of the land required for the Proposed Scheme. There are no records of great crested newts from this area. There appears, from aerial photography, to be suitable terrestrial and aquatic habitat, such that great crested newts could be present.
- 2.4.9 Records of great crested newts from 2006, 2009 and 2010 were returned from GIGL for a group of 4 ponds at Islip Manor and a field to the north of Islip Manor immediately west of the Lord Halsbury Memorial Playing Fields. This group of connected ponds overlaps CFA5 and CFA6. The records indicate a small population of great crested newts with a peak count across all ponds on the same date in 2009 of 10 adults. The citation for Islip Manor SMI also refers to the presence of great crested newts.

### CFA6 South Ruislip to Ickenham

- 2.4.10 As discussed above, records of great crested newts have been returned for a group of ponds at Islip Manor and a field to the north of Islip Manor immediately west of the Lord Halsbury Memorial Playing Fields, which overlap CFA5 and CFA6. The closest of these ponds is 80m south of the Proposed Scheme.
- 2.4.11 There were also records of a medium population of great crested newts across a group of nine ponds to the north of Ickenham Marshes (south of West Ruislip Station), with a peak count across all ponds on one date in 2006 of 14 adults. All of the ponds in this group are over 250m from the land required for the construction of the Proposed Scheme therefore they were scoped out of further surveys.
- 2.4.12 There are four ponds on Ruilsip Golf Course, three of which are within the land required for the construction of the Proposed Scheme, the other of which is within 20m. The citation for Ruislip Golf Course and Old Priory Meadows SMI reports the presence of great crested newts. Furthermore herpetofauna exclusion fencing with pitfall traps was present on the Network Rail land immediately south of the Golf

<sup>&</sup>lt;sup>3</sup> Nature for the CommunityWebsite, <a href="http://natureforthecommunity.co.uk/wp-content/uploads/2012/02/Management-Plan-Adelaide-LNR-2012-17.pdf">http://natureforthecommunity.co.uk/wp-content/uploads/2012/02/Management-Plan-Adelaide-LNR-2012-17.pdf</a> first accessed in September 2012

Course, for works associated with a different project throughout 2013. Network Rail were contacted and asked if it could provide details of the great crested newt population size class present however they did not respond. It is understood that the exclusion fencing has been installed in advance of clearance works to the rail embankment, and it has been assumed that great crested newts are present. A limited HSI survey carried out from the PRoW identified all four ponds on the Golf Course as potentially suitable for great crested newts and requiring further survey although no access was provided for this.

2.4.13 There were no significant records of other amphibian species.

### Discussion of combined results

- 2.4.14 This section brings together the field survey and desk study results to inform a reasonable worst case assumption. Where possible the locations of clusters of ponds that are likely to support a metapopulations have been identified. Factors important in estimating the population size class of each metapopulation include:
  - desk study records (where available);
  - number of ponds;
  - size and assumed quality of ponds for great crested newts;
  - assumed area and quality of terrestrial habitat; and
  - connectivity between aquatic or terrestrial habitats.
- In the absence of full access, this information has been gathered from field surveys undertaken only from PRoW or from aerial photography.

# CFA1 Euston Station and Approach, CFA2 Camden Town, CFA3 Primrose Hill to Kilburn (Camden) and CFA 4 Kilburn (Brent) to Old Oak Common

- 2.4.16 Great crested newts are considered absent from these sections of the Proposed Scheme, due to the general lack of suitable aquatic and terrestrial habitat, the built up urban environment and lack of any great crested newt records found during the desk study. Within CAF3, Adelaide LNR contains two ponds and has suitable terrestrial habitat however the site is limited in size, being only 1 hectare and is isolated from other aquatic habitat due to its urban surroundings. Access limitations prevented field survey to confirm presence or absence, but information from the desk study suggests great crested newts are not present.
- 2.4.17 Within CFA4, areas of suitable terrestrial habitat are present at Wormwood Scrubs Parks and to a lesser extent on the railway land and in the cemeteries. However, the absence of suitable aquatic habitat and the lack of any desk study records within this section of the Proposed Scheme are such that great crested newts are considered absent.

### CFA<sub>5</sub> Northolt Corridor

2.4.18 A medium population of great crested newts is assumed from the desk study, for the group of four ponds to the north of Islip Manor and the field adjacent to Lord Halsbury

- Memorial Playing Fields. This group of four ponds overlaps CFA<sub>5</sub> and 6. The terrestrial habitat in the land required for the Proposed Scheme comprises small areas of arable fields and hedgerows which connect with the other three ponds.
- 2.4.19 A medium population of great crested newts is assumed from a review of aerial photography for wetland habitat at Land South of Carr Road since no field survey was undertaken and no desk study records were returned for the site. There are small areas of suitable terrestrial habitat, and poor habitat connectivity.
- 2.4.20 Presence/absence surveys undertaken at the three ponds in Perivale Wood recorded no great crested newts and no records were reported with the desk study.
- 2.4.21 The presence of further populations of great crested newts in this CFA is considered unlikely due to the lack of suitable water bodies and previous great crested newt records.

### CFA6 South Ruislip to Ickenham

- In this section of the Proposed Scheme there are five assumed metapopulations of great crested newts as follows.
- 2.4.23 Firstly there is the assumed metapopulation of great crested newts amongst the group of four ponds overlapping the border of CFA<sub>5</sub> and 6 to the north of Islip Manor which is discussed above under CFA<sub>5</sub>.
- Heading further west, great crested newts are assumed to be present in the group of four ponds on Ruislip Golf Course, three of which lie within the land required for the Proposed Scheme. Their presence is assumed due to information within the citation for Ruislip Golf Course and Old Priory Meadows SMI. The herpetofauna exclusion fencing with pitfall traps on the adjacent Network Rail land throughout the field surveys in this area in 2013 also suggests the presence of great crested newts, although it has not been possible to confirm this. Whilst Network Rail's exclusion exercise being undertaken on their land immediately west of the River Pinn will temporarily exclude amphibians including great created newts from the land required for the Proposed Scheme, amphibians will re-colonise this area once Network Rail's works are complete and the fencing is removed. Although no population size is reported from the citation, given the surrounding habitat and connectivity, it is considered that a medium size class metapopulation is a reasonable assumption.
- The third assumed metapopulation in CFA6 comprises six waterbodies with connecting suitable terrestrial habitat on the west side of the River Pinn. These include two ponds at the pharmaceutical research facility west of Breakspear Road South, two ponds and the moat at Brackenbury Farm and the moat within the River Pinn corridor. If any of these waterbodies support great crested newts, they are considered to support a separate population to that on Ruislip Golf Course, since they are on the other side of the River Pinn. The River Pinn is a physical barrier to newt movement. Access restrictions prevented surveys being undertaken at the pharmaceutical research facility, Brackenbury Farm and the moat by the River Pinn. No great crested newt records were found through GiGL for this area, however phase 1 habitat surveys carried out at Brackenbury Farm and the pharmaceutical research facility highlighted the potential for great crested newts in these ponds. The moat

within the River Pinn corridor was added into the scope of the assessment following design changes after the 2013 amphibian survey window so was not surveyed. Of these six ponds, only the two ponds within the pharmaceutical research facility lie within the land required for the Proposed Scheme. The Brackenbury Farm ponds are adjacent to the land required and the moat is 170m away from the Proposed Scheme. A presence / absence survey at Copthall Farm did not record great crested newts, and the ponds dried out before four visits are completed. However, these ponds may form part of the habitat for a great crested newt population, if present in this area, during a wetter spring. The size of the metapopulation is unknown however a medium population is assumed from a review of habitat suitability in this area.

- The fourth assumed metapopulation in CFA6 is a group of 17 interconnecting ponds to the east and south of Bayhurst Wood (Ruislip Wood and Poors Field SMI). Three of these ponds are within the Proposed Scheme, 12 are within a 250m radius and the remaining two are within 500m of the Proposed Scheme. No records of great crested newts were returned from GiGL for this area and there is no mention of great crested newts in the citation for the Ruislip Woods SSSI or NNR. All of these 17 ponds were added to the scope of this assessment after the 2013 survey window, due to changes in the scheme design. Many of the ponds are located within intensively managed agricultural fields with limited connectivity to higher quality habitat. Following a reasonable precautionary approach given the lack of surveys, the presence of great crested newts cannot be ruled out and a medium population is assumed.
- The fifth assumed great crested newt metapopulation in CFA6 is that at the two ponds in the northwest corner of Bayhurst Wood, where suitable habitat is present and a medium population is assumed. These are more than 250m away (approximately 660m) from the group of ponds to the east and south of Ruislip Woods SSSI and have therefore not been included in the assumed metapopulation of the latter.
- 2.4.28 Table 5 summarises the assumed great crested metapopulations that exist within the vicinity of the Proposed Scheme and the associated population size classes.

Table 5 Summary of great crested	l newt metapopulations assum	ned to occur within the vicin	tv of the route at CFA1 - 6
i alice y a community or great an account			-,

CFA number	Metapopulation Reference	Location	Ecology survey code of ponds within assumed metapopulation	Estimated population size class of metapopulation	Approximate distance from the Proposed Scheme (m) and orientation
CFA <sub>5</sub>	CFA <sub>5</sub> -AMP <sub>1</sub>	London Canal's SMI South of Carr Road, Greenford	010-AH1-017001 and 010-AH1- 017004	Assumed medium	Within Proposed Scheme and 20m north
CFA5 and CFA6	CFA5 and CFA6 - AMP1	North of Islip Manor	010-AH1-019001 to 010-AH1- 019003	Assumed medium	o10-AH1-019004 is within Proposed Scheme, the others are between 10 and 40m south-east

CFA number	Metapopulation Reference	Location	Ecology survey code of ponds within assumed metapopulation	Estimated population size class of metapopulation	Approximate distance from the Proposed Scheme (m) and orientation
CFA6	CFA6 - AMP1	Ruislip Golf Course	010-AH1-023001, 010-AH1- 024004, 010-AH1-023002	Assumed medium	64A and 64B within Proposed Scheme, and 65m - 20m north
CFA6	CFA6 - AMP2	Pharmaceutical Research facility, Brackenbury Farm, Moat within River Pinn Corridor	AH1-024008, 010-AH1-024028, 010-AH1-024009, 010-AH1-024006, 010-AH1-024006, 010-AH1-024011	Assumed medium	Within Proposed Scheme, or between 10m and 60m away
CFA6	CFA6 - AMP3	Ponds east and south of Bayhurst Wood Nature Reserve	010-AH1-025008, 010-AH1- 025001, 010-AH1-025002, 010- AH1-024012, 010-AH1-024013, 010-AH1-024014, 010-AH1- 025003, 010-AH1-025004, 010- AH1-025005, 010-AH1-026003, 010-AH1-025006, 010-AH1- 025007, 010-AH1-024015, 010- AH1-024018, 010-AH1-024019, 010-AH1-024016, 010-AH1- 024017	Assumed medium	Within Proposed Scheme, or between 10 and 310m away
CFA6	CFA6 - AMP4	Two ponds in the northwest corner of Bayhurst Wood Nature Reserve	010-AH1-026004, 010-AH1- 026005	Assumed medium	Adjacent + 230m south-east

# 3 Reptiles

# 3.1 Introduction

3.1.1 This section of the appendix presents details of baseline information relating to reptiles for the section of the Proposed Scheme that will pass through Community Forum Areas (CFA) 1 to 6 inclusive.

# 3.2 Methodology

3.2.1 Details of the standard methodology utilised for reptile surveys are provided in the Scope and Methodology Report Addendum (Volume 5: Appendix CT-001-000/2).

# 3.3 Deviations, constraints and limitations

3.3.1 Due to access restrictions field surveys were not undertaken at every site identified as requiring further survey during the scoping survey. Those sites are detailed in Table 6.

Table 6 Summary of locations where requirement for reptile survey identified but no access available for survey

Survey site name	Location	OS grid reference	Description of proposed survey location	CFA	Approximate distance from the Proposed Scheme (m) and orientation
North London Line SBI Grade2 (Rail land between York Way and Camley Street, Camden)	Camden	TQ301 841 to TQ297 841.	Narrow areas of trees and scrub with some rough grassland along both the north and south side of the railway in urban Camden. Ballast and rubble piles also provide potential hibernacula.	2	Adjacent
Freight Lane Industrial Area	Camden	TQ 299 840	Land alongside existing railway tracks including ruderal, grassland and patches of scrub	2	Adjacent
Rail land between Regents Park Road and Primrose Hill Road	Camden	TQ281842	Land alongside existing railway tracks including narrow strips of ballast and made ground with sparse ruderal flora and rough grassland	3	Within
Adelaide LNR and Chalk Farm Embankment and Adelaide Nature Reserve Site of Borough Importance Grade 1 (SBI.I)	Camden	TQ 277 843	Grassland, scrub and woodland providing basking opportunities for reptiles.	3	Within
Little Wormwood Scrubs Site of Local Importance (SLI)	Hammersmith	TQ 230 8200	Managed wildlife area in the northern area of this amenity park with rough grassland and log piles. Habitats connected to other suitable reptile habitats via adjacent railway line.	4	138m south of tunnelled section of the Proposed Scheme
Wormwood LNR and SBI I	Hammersmith	TQ 222 818	Extensive rough grassland in the	4	61m south of

Survey site name	Location	OS grid reference	Description of proposed survey location	CFA	Approximate distance from the Proposed Scheme (m) and orientation
			eastern half of the site, with scrub and woodland areas, although largely confined to the edges. Habitats connected to other suitable reptile habitats via adjacent railway line.		tunnelled section of the Proposed Scheme
Land at Canal Way, Kensal Green	London Borough of Ealing	TQ 234 823	Grassland, wet grassland, ruderal and ephemeral/bare perennial and bare ground and made ground	4	Within
Network Rail land within 100m of the Proposed Scheme Adjacent to Canal Way	London Borough of Ealing	TQ 237 821	Land alongside existing railway tracks including ruderal vegetation, grassland, scattered scrub and bare ground	4	Within
Transport For London (TFL) land within 100m of the Proposed Scheme at North Acton	North Acton, London Borough of Ealing	TQ208 8200 to TQ215 816	Large open embankment with rough grassland and further expanses of scattered scrub and ruderal vegetation along rail sidings	4	Within
Network Rail land within 100m of Westgate vent shaft main compound	Hanger Lane, London Borough of Ealing	TQ180 827 to TQ184 827	A narrow strip of scrub and tall ruderal	5	Within
TFL land within 100m of Westgate vent shaft main compound	Hanger Lane, London Borough of Ealing	TQ180 827 to TQ184 827	Scrub and open embankment with rough grassland	5	Adjacent
Guinness Mounds	London Borough of Ealing	TQ 192 823	Scrub, rough grassland and ruderal vegetation	5	Adjacent
Hanger Lane Gyratory SLI	Hanger Lane, London Borough of Ealing	TQ 184 827	Woodland, scrub, rough grassland, ruderal vegetation and bare ground	5	Within
Pipeline adjacent to May Gardens	London Borough of Ealing	TQ174 829	Rough grassland, ruderal vegetation and scrub	5	Within
Perivale Wood Site of Metropolitan Importance (SMI)	Perivale, London Borough of Ealing	TQ 158 835	Unimproved grassland, scrub, woodland edge and ponds	5	Adjacent
TFL land within 100m Greenpark Way vent shaft main compound	Perivale, London Borough of Ealing	TQ150 838 to TQ157 836	Mosaic of grassland and scrub	5	Adjacent
Greenpark Way vent shaft main compound	Perivale, London Borough of Ealing	TQ 155 837	Grassland, scattered scrub and ruderal vegetation	5	Within
Land south of Carr Road	London Borough of Ealing	TQ140 842	Reedbed / swamp, ruderal vegetation scrub and grassland	5	Adjacent
TFL land within 100m of Mandeville Road vent	London Borough	TQ133 844	Wooded embankment	5	Within

Survey site name	Location	OS grid reference	Description of proposed survey location	CFA	Approximate distance from the Proposed Scheme (m) and orientation
shaft main compound	of Ealing				
Lord Halsbury Memorial Fields	London Borough of Ealing	TQ122 848	Rough grassland adjacent to railway	5	Within
South Ruislip vent shaft main compound	South Ruislip, London Borough of Hillingdon	TQ 108 856	Scrub and grassland area adjacent to the railway	6	Adjacent
TFL land within 100m of Ruislip vent shaft main compound	South Ruislip, London Borough of Hillingdon	TQ106 857 to TQ109 855	A south facing embankment with rough grassland and scattered scrub	6	Adjacent
TFL land within 100m of tunnel portal at West Ruislip	West Ruislip, London Borough of Hillingdon	TQ083 868 to TQ084 868	Short maintained grassland and scrub - with connectivity to more suitable habitat	6	Adjacent
Ruislip Golf Course	West Ruislip, London Borough of Hillingdon	TQ 080 872	Golf course with amenity and rough grassland, lines of trees, wet ditches and ponds	6	Within
River Pinn corridor	West Ruislip, London Borough of Hillingdon	TQ073871	River with adjacent riparian vegetation ad trees, scrub, rough grassland, amenity grassland and ruderal vegetation	6	Within
Brackenbury Farm	Uxbridge, London Borough of Hillingdon	TQ 080 872	Private garden with mature trees and grassland	6	137m south
Pharmaceutical research facility	Uxbridge, London Borough of Hillingdon	TQ069 873	Areas of rough grassland with patches of bramble scrub and two ponds	6	Within
Fields to the south, west and east of Bayhurst of Bayhurst Wood	London Borough of Hillingdon	TQ650 887	Field margins, hedgerows, ponds and woodland edge	6	Within

- 3.3.2 Several sites were subject to surveys that deviated from the methodology, and comprised the following:
  - St Mary's RC Cemetery (CFA<sub>4</sub>) Survey teams could not start until after 9am, when cemetery staff were present to allow access. The later start did not adversely affect the survey findings. A lower density. of corrugated metal reptile tins refugia, a departure from the 50:50 ratio tin to roofing felt required, were deployed on site following a landowner request due to the sensitivity of the site and the potential trip hazard that the refugia posed to visitors to the site. This is did not adversely affect the survey findings;
  - Land on the north-west side of Breakspear Road South (CFA6) No corrugated metal reptile tins were deployed following a request from the landowner due

- to young livestock present in the fields. All refugia comprised roofing felt, and is not considered likely to have adversely affected the survey findings; and
- For all reptile surveys carried out on Network Rail land, only bitumen roofing felt refugia were used since corrugated metal refugia could not be used due to the health and safety implications. No survey work occurred within 3m of the tracks due to health and safety implications.
- 3.3.3 A number of constraints and limitations to survey were encountered at several of the sites and comprised the following:
  - TFL land within 100m of Westgate vent shaft main compound due to a lack of space between the dense scrub and running railway to safely carry out a reptile survey (a minimum of 3m is required) surveys could not be carried out; and
  - Copthall Farm (CFA6) cattle in the field disturbed and damaged pieces of felt being used for survey, but this only occurred in a few fields where the cattle were present. The majority of refugia were undisturbed and as such this did not adversely affect the survey findings.
- 3.3.4 Network Rail land between B466 and Station Approach, South Ruislip (o10-RE1-o20001) (CFA6) only three surveys were carried out at this location due to access constraints which is less than that recommended. A small population of slow worms (*Anguis fragilis*) was recorded on the site. Given the small amount of suitable habitat at this location, it is likely that this is an accurate reflection of the population status of slow worm. However, it is also possible that low populations of other common reptile species are present on the site.
  - At rail land south of Ruislip Golf Course (010-RE1-024005,010-RE1-024006,010-RE1-024005 and, 010-RE1-023002) and rail land between
    Breakspear Road South and Harvil Road (010-RE1-025002 and 010-RE1-025002) in CFA6, the survey visit on 25 July 2013 was carried out in above optimum temperatures, up to 25°C. However, the survey on this date recorded the highest count of slow worms for some sites and is therefore considered to still count as a viable visit.

## 3.4 Baseline

- 3.4.1 Some sites were scoped out for the need for further reptile surveys during extended Phase 1 or scoping survey from PRoW. These include visits: St James's Gardens (CFA1) which was scoped out due to only very limited areas of habitat with potential to support reptiles, and its isolation from any other areas of suitable reptile habitat; rail land on the approach to Euston Station which was scoped out as it was almost devoid of vegetation; and Camden Gardens which was scoped out due to the absence of suitable habitat and a lack of connectivity to areas with potentially suitable habitat.
- 3.4.2 No sites were scoped out as a result of scoping visits conducted specifically to ascertain the potential of sites to support reptiles.
- 3.4.3 The summary of survey work undertaken is presented in Table 7.

Table 7 Summary of reptile survey work undertaken in CFA 1 to 6 inclusive

Ecology survey code	Survey location	OS grid reference	Survey method	Survey start date	Survey end date	No. survey visits completed	Survey result	CFA	Approximate distance from the Proposed Scheme (m) and orientation
010-RE1- 007002	Kensal Green Cemetery	TQ 2322 8253	Refugia survey	22/04/2013	3/6/2013	7	No reptiles found	4	Tunnelled section of the Proposed Scheme intersects site
010-RE1- 007001	St Mary's RC Cemetery	TQ 2262 8254	Refugia survey	15/05/2013	7/8/2013	7	No reptiles found	4	led section of the Proposed Scheme
010-RE1- 015001	Rail land at Greenpark Way vent shaft main compound (east)	TQ158,835 to TQ155, 836	Refugia survey	15/04/2013	4/7/2013	7	4 slow worm (Anguis fragilis) (Low)	5	Adjacent to Proposed Scheme
010-RE1- 015002	Rail land at Greenpark Way vent shaft main compound (west)	TQ153,837 to TQ150,838	Refugia survey	15/04/2013	4/7/2013	7	6 slow worm (Low)	5	Adjacent to Proposed Scheme
010-RE1- 017001	Rail land at Mandaville Rd vent shaft main compound	TQ 1327 8451 - TQ 1371 8434	Refugia survey	15/04/2013	4/7/2013	6	20 slow worm (Low)	5	Adjacent to Proposed Scheme
010-RE1- 024001	Land on the north west side of Breakspear Road South	TQ 0725 8737	Refugia survey	23/04/2013	4/6/2013	7	No reptiles found	6	27m north of Proposed Scheme
010-RE1- 024001	Gatemead Farm	TQ 0723 8726	Refugia survey	23/04/2013	4/6/2013	7	No reptiles found	6	6m north of Proposed Scheme
010-RE1- 024002	Oak Farm	TQ 0743 8731	Refugia survey	24/04/2013	4/6/2013	7	1 grass snake ( <i>Natrix</i> natrix) (low)	6	Proposed Scheme intersects part of site
010-RE1- 024004	Land on the east side of Breakspear Road South	TQ 0719 8710	Refugia survey	23/04/2013	4/6/2013	7	No reptiles found	6	76m south of Proposed Scheme
010-RE1- 025001	Copthall Farm	TQ 0676 8675	Refugia survey	24/04/2013	7/8/2013	7	No reptiles found	6	307m south of Proposed Scheme
010-RE1- 020001	Network Rail land within 100 of Ruislip vent shaft main compound	TQ106 857 to TQ109 855	Refugia survey	30/05/2013	5/7/2013	3	1 slow worm	6	Adjacent to Proposed Scheme

Ecology survey code	Survey location	OS grid reference	Survey method	Survey start date	Survey end date	No. survey visits completed	Survey result	CFA	Approximate distance from the Proposed Scheme (m) and orientation
010-RE1- 024005	Rail land south of Ruislip Golf Course, (from Ickenham Stream - River Pinn)	TQ 0735 8716 - TQ 0802 8698	Refugia survey	16/04/2013	4/7/2013	6	24 slow worm (Low); 4 common lizard ( <i>Zootoca</i> <i>vivipara</i> ) (Low); 2 grass snake (Low)	6	Adjacent to Proposed Scheme
010-RE1- 024006	Rail land south of Ruislip Golf Course, (between River Pinn and Breakspear Road South)	TQ 0721 8720 - TQ 0734 8718	Refugia survey	16/04/2013	4/7/2013	6	8 slow worm (Low)	6	Adjacent to Proposed Scheme
010-RE1- 024005	Rail land south of the pharmaceutical research facility on the south side of the railway line.	TQ 0736 8716 - TQ 0800 8697	Refugia survey	16/04/2013	4/7/2013	5	7 slow worm (Low)	6	Adjacent to Proposed Scheme
010-RE1- 023002	Rail land south of Ruislip Golf Course (south of the railway line)	TQ 0800 8697 - TQ 0835 8682	Refugia survey	16/04/2013	4/7/2013	6	1 slow worm (Low)	6	Adjacent to Proposed Scheme
010-RE1- 025002	Rail land between Breakspear Rd. South and Harvil Rd , (south of pharmaceutical research facility)	TQ 0714 8721 - TQ 0668 8729	Refugia survey	16/04/2013	4/7/2013	6	18 slow worm (Low)	6	Adjacent to Proposed Scheme
010-RE1- 025002	Rail land between Breakspear Rd. South and Harvil Rd, (south of Newyears Green Covert)	TQ 0600 8742 - TQ 0667 8730	Refugia survey	16/04/2013	4/7/2013	6	16 slow worm (Low)	6	Adjacent to Proposed Scheme

### **Discussion**

### CFA<sub>1</sub>

- 3.4.4 No records of reptiles were returned from GiGL for this section of the Proposed Scheme.
- 3.4.5 St James's Garden contains only very small strips of ruderal vegetation adjacent to the eastern boundary which may support reptiles, but due to their small size, of limited suitability for reptiles. The site is surrounded by buildings and roads and is isolated from other reptile habitat. The presence of reptiles in St James's Garden is therefore unlikely and the site was scoped out during the initial walkover.
- The habitats on the railway corridor are not suitable for reptiles in CFA1, as the area is almost devoid of vegetation.

#### CFA<sub>2</sub>

- 3.4.7 No records of reptiles were returned from GiGL for this section of the Proposed Scheme.
- 3.4.8 Suitable habitat for reptiles occurs within the Network Rail land south of Primrose Hill Station, between Camley Street and York Way, and at the adjoining industrial area at Freight Lane, in the form of mosaics of trees, scrub, ruderals, grassland and ballast/rubble piles. These habitats are generally small and isolated from other areas of suitable habitat and are unlikely to support anything other than very low numbers reptiles.

### CFA<sub>3</sub>

- 3.4.9 No records of reptiles were returned from GiGL for this section of the Proposed Scheme.
- 3.4.10 Suitable habitat for reptiles is present on rail land, including bare ground and rough grassland.
- 3.4.11 Despite the presence of suitable habitat including grassland in Adelaide LNR and Chalk Farm Embankment and Adelaide Nature Reserve SBI.I, there are no records of reptiles<sup>4</sup> and a retaining wall prevents connectivity to adjacent rail land.

### CFA<sub>4</sub>

- 3.4.12 70 records of common lizard (*Zootoca vivipara*) for the area including Wormwood Scrubs, Little Wormwood Scrubs and the adjacent rail land were returned from GiGL. There were no other records of reptiles in data from GiGL for the remainder of this section of the Proposed Scheme.
- 3.4.13 Common reptiles occur in moderate numbers at Wormwood Scrubs Park where extensive grassland habitat of high quality is present, and are also likely to occur within the adjacent areas of mosaic habitat within the rail land at Old Oak Common. Anecdotal reports of both common lizard and slow worm were provided by London

<sup>&</sup>lt;sup>4</sup> <a href="http://natureforthecommunity.co.uk/wp-content/uploads/2012/02/Management-Plan-Adelaide-LNR-2012-17.pdf">http://natureforthecommunity.co.uk/wp-content/uploads/2012/02/Management-Plan-Adelaide-LNR-2012-17.pdf</a> first accessed in September 2012

Borough ecologists during an accompanied site visit. It is likely that common reptiles will be present in other areas of rail land within the Proposed Scheme which are connected to Wormwood Scrubs.

3.4.14 Reptile surveys were carried out at Kensal Green Cemetery and St Mary's RC Cemetery. The majority of these sites are amenity grassland and ornamental shrubs and is heavily managed. These habitats are sub-optimal for reptiles. Most areas within the cemeteries are also regularly disturbed by visitors. There are some limited suitable areas of scrub and unmanaged grassland, especially adjacent to the Grand Union Canal, although no reptiles were recorded during the surveys. The Grand Union Canal is a physical barrier for the movement of reptiles from areas where they are known to be present further south such as rail land, Wormwood Scrubs and Little Wormwood Scrubs.

### CFA<sub>5</sub>

- 3.4.15 Slow worm has been reported at Perivale Wood<sup>5</sup>. Records of grass snake (*Natrix natrix*) and slow worm at the Grand Union Canal at Greenford were included in data returned from GiGL and records of slow worm and common lizard have been returned for the area immediately south of the existing mainline railway and Grand Union Canal at Greenford. Records of slow worm have also been returned at Lord Halsbury Memorial Playing Fields.
- 3.4.16 The desk study also indicates suitable habitat is present for common species of reptiles in small areas of railway habitats and adjacent land at Hanger Lane Gyratory, Guinness Mounds, May Gardens, Greenpark Way, land south of Carr Road and Mandeville Road.
- 3.4.17 Surveys found low populations of slow worm along the railway corridor in rail land at Greenpark Way vent shaft main compound and rail land at Mandeville Road shaft location. It is possible that these are connected to populations present around Perivale Wood and other habitats south of the Grand Union Canal. As the area is largely developed, the Grand Union Canal, roads and other development will act as a barrier to dispersal. The existing railway corridor is therefore the most likely source of movement between populations to the east and west (CFAs4 and CFA6 respectively).

#### CFA6

- 3.4.18 Slow worms have been recorded along the boundary of the railway sidings to the south of the Waste Transfer Station, South Ruislip. Slow worms and common lizards have been reported along the boundaries of the Metropolitan and Piccadilly lines to the north and south of where the Proposed Scheme crosses the line in West Ruislip within data returned from GiGL.
- 3.4.19 The desk study also indicates suitable habitat is present for common species of reptiles at South Ruislip vent shaft main compound and other small areas of land adjacent to the existing railway.

<sup>&</sup>lt;sup>5</sup> Records provided by the Selbourne Society October 2012.

- Low populations of slow worm, common lizard and grass snake were recorded during surveys along the existing railway line.
- Grass snakes were recorded in rail land south of Ruislip Golf Course, rail land between Breakspear Road South and Harvil Road and rail land south of Ruislip Golf Course. In addition, a single grass snake was recorded at Oak Farm, adjacent to the River Pinn corridor. Grass snakes are also likely to be present at Brackenbury Farm, the pharmaceutical research facility, Ruislip Golf Course and along the River Pinn corridor due to suitable habitat which adjacent to the existing railway, although no surveys were undertaken in these areas.
- 3.4.22 Slow worm were recorded from rail land throughout this area, in numbers of up to 24 individuals, reflecting low populations. Slow worm are also likely to be present at Brackenbury Farm, the pharmaceutical research facility, Ruislip Golf Course and along the River Pinn corridor due to suitable habitat which adjacent to the existing railway, although no surveys were undertaken in these areas.
- 3.4.23 Common lizard was only recorded at one location on rail land south of Ruislip Golf Course. The species is likely to be present in other areas which were not surveyed, including Ruislip Golf Course, albeit in low numbers.
- 3.4.24 No desk study records were returned for the fields south, east and west of Bayhurst Wood. Scoping surveys from PRoW recorded habitat suitable to support common reptile species including rough grassland, hedgerows and grassland field margins and around the small ponds which are present in this area. Records of all four common reptiles; slow worm, adder, common lizard and grass snake, were returned within data from GiGL from Poor's Field, part of Ruislip's Woods SSSI which is approximately 1.3km to the north-east of the fields around Bayhurst Wood. Despite this distance there is good connectivity from Poor's Field and the fields around Bayhurst Wood. In the absence of field surveys, it has been assumed, due to the connectivity, that common reptiles are present in the fields around Bayhurst Wood.
- 3.4.25 The reptile populations in CFA6 are connected to populations recorded in CFA5 via the existing railway corridor and also to suitable habitats on rail and non-rail land in CFA7, to the west.

# 4 Breeding birds

### 4.1 Introduction

4.1.1 This section of the appendix presents details of baseline information relating to breeding birds for the section of the Proposed Scheme that will pass through Community Forum Area (CFA) 1 to 6 inclusive.

## 4.2 Methodology

- 4.2.1 Details of the standard methodology utilised for breeding bird surveys are provided in the Technical Note HS2 Ecological Surveys: Field Survey Methods and Standards which is included as an appendix to Volume 1.
- 4.2.2 Desk study records relating to breeding birds, and species specific information was obtained from the following sources:
  - Greenspace Information for Greater London (GiGL);
  - The Urban Birder's website;<sup>6</sup>
  - Blackredstart's UK website;<sup>7</sup>
  - British Birds 105. July 2012. 352-416; and
  - Natural England's website.<sup>8</sup>
- Table 8 provides a summary of all sites at which breeding birds were surveyed within CFA1 to 6 inclusive.

Table 8 Summary of sites at which breeding bird surveys were undertaken in CFA1 to 6 inclusive

Ecology survey code	Survey site/location	OS grid reference	Habitat types included in survey	Survey date	CFA
010-BB1- 000001	St James's Gardens	TQ 293 827 (central grid ref)	Maintained grass, flowerbeds, some shrubs and many mature trees. The site also contains a school, office/commercial buildings, a derelict hospital and some residential housing.	18 March 2013 08 April 2013 01 May 2013 13 May 2013 10 June 2013 24 June 2013 08 July 2013	1
010-BB1- 001001	Along Public Rights of Way (PRoW) around Euston Station (black redstart survey visits)	TQ 294 827	Hard standing and buildings comprised of retail, commercial, housing, industrial and transport infrastructure, including rail, with some limited green	24 April 2013 20 May 2013	1

<sup>&</sup>lt;sup>6</sup> Urban Birder's website, http://www.theurbanbirder.com/, Accessed throughout 2013

<sup>&</sup>lt;sup>7</sup> Blackredstarts.org.uk website http://www.blackredstarts.org.uk/, Accessed throughout 2013

<sup>8</sup> Natural England Website, http://www.sssi.naturalengland.org.uk/Special/sssi/sssi\_details.cfm?sssi\_id=1003633\_, Accessed throughout 2013

Ecology survey code	Survey site/location	OS grid reference	Habitat types included in survey	Survey date	CFA
			spaces and gardens	28 May 2013	
				10 June 2013	
				01 July 2013	
				15 July 2013	
010-BB1-	London's Canals, Regent's	TQ 279 835-TQ	The canal is located within a mixture of	22 March 2013	2
001003	Canal section (including stretch of canal in CFA <sub>3</sub> , see	300 834 (linear grid ref) and TQ	residential housing, commercial and retail buildings and transport	08 April 2013	
	below)	283 838 (central grid ref)	infrastructure. The canal is bordered by vegetation with a good cover of mature	01 May 2013	
		gilarei	trees and shrubs along its banks.	13 May 2013	
				10 June 2013 01 July 2013 15 July 2013 22 March 2013 08 April 2013 01 May 2013 13 May 2013 10 June 2013 24 June 2013 08 July 2013	
010-BB1-	Camden Gardens	TQ 289 842	Maintained grassland, flowerbeds,	24 June 2013	2
001002		(central grid ref)	shrubs and some mature trees. The site is bisected by a railway viaduct.	o8 July 2013	
010-BB1-	Along PRoW around and	TQ294 842	Hard standing and buildings comprised	26 April 2013	2
002001	.		of retail, commercial, housing, industrial and transport infrastructure,	22 May 2013	
			including rail, with some limited green	12 June 2013	
			spaces and gardens.	16 July 2013 26 April 2013 22 May 2013 12 June 2013 29 May 2013 16 July 2013	
010-BB1-	Along PRoW around and	TQ 259 837	Hard standing and buildings comprised	09 May 2013	3
002002	throughout South Hampstead (black redstart		of retail, commercial, housing, industrial and transport infrastructure,	o1 July 2013 15 July 2013 22 March 2013 08 April 2013 10 June 2013 10 June 2013 24 June 2013 08 July 2013 16 July 2013 16 July 2013 12 June 2013 29 May 2013 16 July 2013 16 July 2013 17 June 2013 29 May 2013 21 May 2013 21 June 2013 22 May 2013 23 May 2013 24 June 2013 25 April 2013 26 April 2013 27 July 2013 28 July 2013 29 May 2013 21 June 2013 22 May 2013 23 May 2013 24 June 2013 25 April 2013 26 April 2013 27 July 2013 28 May 2013 29 May 2013	
	survey visits)		including rail, with some limited green		
			spaces and gardens.	13 June 2013	
				03 July 2013	
				17 July 2013	
010-BB1-	Along PRoW around and to	TQ 286 835	Hard standing and buildings comprised	25 April 2013	2, 3
002001	the north of Regent's Park	_ 33	of retail, commercial, housing,	·	, 3
	(black redstart survey visits)		industrial and transport infrastructure, including rail, with some limited green		
			spaces and gardens.		
DD:	Landan Cwand Union Com.	TO - (CO - TO	Canal Assumath same visite was de-	•	
010-BB1- 008001	London Grand Union Canal, Old Oak Common section	TQ 216 824-TQ 232 823 (linear	Canal towpath comprising made ground and amenity grassland and	20 Warch 2013	4

Ecology survey code	Survey site/location	OS grid reference	Habitat types included in survey	Survey date	CFA
	(including stretch of canal in	grid ref)	bordered by ornamental shrubbery,	10 April 2013	
	CFA5, see below)		scrub and trees.	30 April 2013	
				13 May 2013	
				10 June 201324 June 2013	
				08 July 2013	
010-BB1-	Wormwood Scrubs	TQ 222 817	Grassland, comprising mown amenity	18 March 2013	4
008002		(central grid ref)	grassland and rough grassland with scattered scrub. The vegetation	15 April 2013	
			bordering the site is a mixture of mature trees and scrub, the scrub	02 May 2013	
	being particu	being particularly extensive along the	14 May 2013		
			railway line.	11 June 2013	
				25 June 2013	
				09 July 2013	
010-BB1-		TQ 229 819	Grassland, comprising mown amenity	19 March 2013	4
007002		(central grid ref)	grassland and rough grassland with some dense patches of scrub. The	09 April 2013	
			vegetation bordering the site is a mixture of mature trees and scrub.	30 April 2013	
				13 May 2013	
				24 June 2013	
				08 July 2013	
010-BB1-	St Mary's RC Cemetery	TQ 226 824	Amenity grassland and mature trees	03 May 2013	4
007003		(central grid ref)		21 May 201312 June 2013	
				26 June 2013	
				10 July 2013	
010-BB1-	Kensal Green Cemetery	TQ 229 825	Amenity grassland and mature trees	21 March 2013	4
007001		(central grid ref)		08 April 2013	
				03 May 2013	
				20 May 2013	
				12 June 2013	
				26 June 2013	
				07 July 2013	
010-BB1-	Along PRoW around and	TQ 236 841	Hard standing and buildings comprised	10 May 2013	4
006001	throughout Kensal Rise (black redstart survey visits)		of retail, commercial, housing, industrial and transport infrastructure, including rail, with some limited green	23 May 2013	

Ecology survey	Survey site/location	OS grid reference	Habitat types included in survey	Survey date	CFA
code			spaces and gardens	31 May 2013	
			Spaces and garacins	13 June 2013	
				04 July 2013	
		70 0		17 July 2013	
010-BB1- 009001	Along PRoW around and throughout Old Oak Common	TQ 213 820	Hard standing and buildings comprised of retail, commercial, housing,	10 May 2013	4
	(black redstart survey visits)	TQ 210 820	industrial and transport infrastructure, including rail, with some limited green	24 May 2013	
			spaces and gardens	14 June 2013	
				05 July 2013	
				19 July 2013	
010-BB1-	Area South of Willesden	TQ 231 827	Hard standing and buildings comprised	10 May 2013	4
009002	EuroTerminal main compound (black redstart		of retail, commercial, housing, industrial and transport infrastructure,	24 May 2013	
	survey visits)	including rail, with some limited green spaces and gardens	_ =	14 June 2013	
			05 July 2013		
				19 July 2013	
010-BB1-	Along PRoW adjacent to St	ong PRoW adjacent to St	03 July 2013	4	
008003	Mary's RC Cemetery (black redstart survey visits)	TQ 221 822	grassland and mature trees	18 July 2013	
010-BB1- 008001	London Grand Union Canal, Old Oak Common section	TQ 227 822	Canal towpath comprising made	20 March 2013	5
008001	(note - survey results are		ground and amenity grassland and bordered by ornamental shrubbery,	10 April 2013	
	combined with and given in London's Canals, Grand		scrub and trees	30 April 2013	
	Union Canal at Old Oak			13 May 2013	
	Common in CFA <sub>4</sub> )			24 June 2013	
				08 July 2013	
010-BB1-	Network Rail land within	TQ 182 826	Grassland, scattered scrub, ruderals	03 April 2013	5
012001	250m of Hanger Lane vent shaft main compound, Ealing	(central grid ref)	and bare ground with railway ballast	22 April 2013	
	Share main compound, Laimig			22 May 2013	
				o3 June 2013	
				19 June 2013	
				11 July 2013	
010 DD-	Notwork Pail land within	TO 450 905	Graceland coattored court middle		
010-BB1- 014001	Network Rail land within 250m of Greenpark Way, vent	TQ 153 837 (central grid ref)	Grassland, scattered scrub, ruderals and bare ground with railway ballast	03 April 2013	5
	shaft main compound, Ealing			22 April 2013	
				22 May 2013	
				04 June 2013	

Ecology survey	Survey site/location	OS grid reference	Habitat types included in survey	Survey date	CFA
code					
				19 June 2013	
010-BB1-	Network Rail land within	TQ 135 843	Scrub, ruderal and bare ground with	04 April 2013	5
017001	250m of Mandeville Road, Northolt vent shaft main	(central grid ref)	railway ballast	23 April 2013	
	compound, Ealing			23 May 2013	
				03 June 2013	
				20 June 2013	
010-BB1-	Gatemead Farm	TQ 072 872	Hedgerows, agricultural grassland.	25 March 2013	6
024007		(central grid ref)		29 April 2013	
				22 May 2013	
				14 June 2013	
				27 June 2013	
				11 July 2013	
				25 July 2013 (Barn owl survey visit)	
010-BB1-	Land on the north-west side	TQ 072 875	The habitat comprises two fields which	25 March 2013	6
024002	of Breakspear Road South, South Harefield, Ickenham,	(central grid ref)	are currently used for horse and cattle grazing. The fields are bordered by	11 April 2013	
	Uxbridge		hedgerows, a line of trees and a public footpath with mature trees and scrub.	29 April 2013	
				22 February 2013	
				14 June 2013	
				27 June 2013	
				11 July 2013	
				25 July 2013 (Barn owl survey visit)	
010-BB1-	Land on the East side of	TQ 072 870	Areas of rough grassland with patches	25 March 2013	6
024003	Breakspear Road, South	(central grid ref)	of bramble scrub	11/ April 2013	
				29 April 2013	
				22 May 2013	
				13 June 2013 (Kingfisher survey visit)	
				13 June 2013	
				27 June 2013	
				28 June 2013	

Ecology survey code	Survey site/location	OS grid reference	Habitat types included in survey	Survey date	CFA
				(Kingfisher survey visit)	
				11 July 2013 (and Kingfisher survey visit on this date)	
				25 July 2013 (Barn owl survey visit)	
010-BB1- 024001	Oak Farm	TQ 074 872 (central grid ref)	Farmhouse with outbuildings, grazed fields bordered by trees and scrub; a tree/scrub-lined stream (the River Pinn). To the south is a railway line embankment with scrub and to the north some residential housing and outbuildings.	25 March 2013	6
				11 April 2013	
				29 April 2013	
				22 May 2013	
				14 June 2013	
				27 June 2013	
				11 July 2013	
				25 July 2013 (Barn owl survey visit)	
010-BB1- 024004	Along PRoW through Ruislip Golf Course	TQ 080 871 (central grid ref)	Amenity grassland, trees and shrubs. There are a few small ponds in the site and a tree/scrub-lined stream (the River Pinn) borders the west of the site	12 March 2013	6
				20 March 2013	
				17 April 2013	
				30 April 2013	
				14 May 2013	
				28 June 2013	
				11 July 2013	
010-BB1- 024005	Mad Field Covert	TQ 076 868 (central grid ref)	Mature woodland, bounded by amenity grassland (playing fields) to the north and residential housing around the remainder of the site	20 March 2013	6
				17 April 2013	
				30 April 2013	
				16 May 2013	
				14 June 2013	
				28 June 2013	
				11 July 2013	
010-BB1- 025001	Copthall Farm and Copthall	TQ o66 867 (central grid ref)	Deciduous woodland, hedgerows, agricultural land	26 March 2013	6
	Covert			12 April 2013	

Ecology survey	Survey site/location	OS grid reference	Habitat types included in survey	Survey date	CFA
code				19 April 2013	
				29 April 2013	
				17 May 2013	
				14 June 2013	
				28 June 2013	
				12 July 2013	
				25 July 2013 (Barn owl survey visit)	
010-BB1- 025001	Copthall Farm - overlooking Copthall Covert (hobby survey visit)	TQ o66 867 (central grid ref)	Deciduous woodland, hedgerows and agricultural land	11 July 2013	6
010-BB1-	Highway Farm	TQ 063 878	Hedgerows, agricultural grassland	18 April 2013	6
024003		(central grid ref)		01 May 2013	
				17 May 2013	
				14 June 2013	
				28 June 2013	
				12 July 2013	
				26 July 2013 (Barn owl survey visit)	
010-BB1-	Network Rail land within	TQ 109 855	Housing, retail, commercial, industrial	25 April 2013	6
020001	250m of South Ruislip Station vent shaft main compound,	(central grid ref)	and transport infrastructure, including rail, with some limited green spaces	22 May 2013	
	Hillingdon		and gardens	03 June 2013	
				19 June 2013	
				11 July 2013	
	N . 15 11 11 .	70 0			
010-BB1- 023001	Network Rail land between Ickenham High Road and	TQ 079 870 (central grid ref)	A strip of secondary woodland, interrupted by patches of scrub and	04 April 2013	6
	Breakspear Road South,	_	areas of tall ruderals. This section of the rail land also includes the River Pinn	24 April 2013	
	Hillingdon		corridor at the western end	24 May 2013	
				05 June 2013	
				21 June 2013	
010-BB1-	Network Rail land between	TQ 066 872	Scrub, woodland and ruderal	05 April 2013	6
024006	Breakspear Road South and Harvil Road, Hillingdon	(central grid ref)	vegetation	25 April 2013	
	., 522			23 May 2013	
				04 June 2013	
				24 23110 2013	

Ecology survey code	Survey site/location	OS grid reference	Habitat types included in survey	Survey date	CFA
				22 June 2013	
010-BB1- 024008	Ickenham Pumping Station (barn owl survey visit)	TQ 074 874	Areas of rough grassland with patches of bramble scrub	25 July 2013	6
010-BB1- 025004	Shorthill Cottage (barn owl survey visit)	TQ063 871	Derelict farmhouse with outbuildings and hard standing with patches of bramble scrub around the periphery	25 July 2013	6
010-BB1- 025005	PRoW around Bayhurst Wood and St Leonards Farm (barn owl survey visit)	TQ067 883	Ancient deciduous woodland, hedgerows and agricultural land	26 July 2013	6

## 4.3 Deviations, constraints and limitations

## 4.3.1 Limitations in CFA1:

- Along PRoW around Euston Station the black redstart surveys were carried
  out from PRoW only. Most residential areas were accessible from PRoW but
  not all industrial/commercial areas could be accessed. Whilst this is not
  considered to have had a significant impact on the results of the surveys for
  this area it is not possible to say that all black redstarts would be located with
  this methodology.
- Regent's Park due to scheme design changes, Regent's Park was not subject to breeding bird surveys. A precautionary approach has been followed drawing on desk study data.

## 4.3.2 Limitations in CFA2 to 3:

 Along PRoW around and to the north of Regent's Park - the black redstart surveys were carried out from PRoW only. Most residential areas were accessible from PRoW but not all industrial/commercial areas could be accessed. Whilst access constraints are not considered to have had a significant impact on the results of the survey the presence of birds in these areas cannot be wholly excluded. However this area is not part of the core distribution of black redstart in London.

## 4.3.3 Limitations in CFA2:

 Along PRoW around and throughout Camden Town - the black redstart surveys were carried out from PRoW only. Most residential areas were accessible from PRoW but not all industrial/commercial areas could be accessed. Whilst this is not considered to have had a significant impact on the results of the surveys for this area it is not possible to say that all black redstarts would be located with this methodology. However this area is not part of the core distribution of black redstart in London.

#### 4.3.4 Limitations in CFA3:

 Along PRoW around and throughout South Hampstead - the black redstart surveys were carried out from PRoW only. Most residential areas were accessible from PRoW but not all industrial/commercial areas could be accessed. Whilst access constraints are not considered to have had a significant impact on the results of the survey the presence of birds in these areas cannot be wholly excluded. However this area is not part of the core distribution of black redstart in London.

#### 4.3.5 Limitations in CFA4:

- Along PRoW around and throughout Kensal Rise, Old Oak Common, and the
  area south of the Willesden EuroTerminal main compound- the black redstart
  surveys were carried out from PRoW only. Most residential areas were
  accessible from PRoW but not all industrial/commercial areas could be
  accessed. Whilst access constraints are not considered to have had a
  significant impact on the results of the survey the presence of birds in these
  areas cannot be wholly excluded. However this site is not part of the core
  distribution of black redstart in London.
- Along PRoW adjacent to St Mary's RC Cemetery black redstart surveys. Only two surveys were carried out, starting in July. These late surveys were initiated after the discovery of a territorial black redstart in St Mary's RC Cemetery.
- St Mary's RC Cemetery the first breeding bird survey was not carried out until o3 May 2013 as access was not obtained until then. This is not considered to have had a significant impact on the results of the surveys for this site.

## 4.3.6 Limitations in CFA6:

- Along PRoW through Ruislip Golf Course the breeding bird surveys for this site were carried out from PRoW only. This is not considered to have had a significant impact on the results of the surveys for this site.
- Along PRoW around Bayhurst Wood and St Leonard's Farm originally this
  area did not lie within 250m of the land required for the construction of the
  Proposed Scheme but after the end of the breeding bird survey period, design
  changes brought it within 250m. As a consequence breeding bird surveys from
  this PRoW were not undertaken.
- A combined Stage 1 and Stage 2 Barn Owl Field Survey was conducted between Ruislip and South Harefield within those land parcels and PRoW where access had been confirmed. The Stage 3 Survey which aims to confirm breeding at those Potential Nest Sites (PNS) recorded during the Stage 1 and 2 Surveys and which requires the use of ladders, was not permitted for health and safety reasons. The requirement to complete all surveys by 31 July 2013 meant that any late breeding by barn owls could not be recorded.
- 4.3.7 Table 8 summarises the breeding bird survey locations in CFA1 to CFA 6 where no access was available for survey.

 ${\sf Table}\ {\it 9}\ {\sf Summary}\ {\sf of}\ {\sf breeding}\ {\sf bird}\ {\sf survey}\ {\sf locations}\ {\sf where}\ {\sf no}\ {\sf access}\ {\sf available}\ {\sf for}\ {\sf survey}$ 

Survey site/location	OS grid reference	Description of proposed survey location and reason for identifying requirement for survey	CFA
HS1 Link - part of Network Rail estate	TQ 298 841 to TQ 281 843	Rail land habitats providing limited foraging and nesting areas	2
Network Rail land south of Primrose Hill Station	TQ 275 842 to TQ 284 839	Rail land and associated disturbed ground and hard standing, with adjacent mosaic of rough grassland, scrub and broadleaved trees within the western section of the area	2
North London Line SBI	TQ 299 841	This Grade II SBI comprises the remains of the extensive 'wasteland' habitats of the former King's Cross Goods Yard, most of which has been redeveloped. The habitats at the site consist of scrub, scattered trees and patches of tall herbs and grasses.	2
Adelaide LNR and rail land to the south	TQ 276 843	Open grassland and disturbed ground	3
Car Giant, Hythe Road	TQ 222 823	For black redstart	4
Old Oak Common railway depot and Old Oak Common Sidings Birch Wood Grade I SBI (part of Network Rail estate)	TQ 218 826	Scrub, secondary woodland, semi-improved neutral grassland and tall herbs	4
Acton Rail Sides SBI Grade 1 - part of Network Rail estate	TQ 211 817	This Grade 1 SBI comprises a mosaic of trees, scrub and grassland with potential to support breeding birds	4
Newyears Green Covert	TQ 065 876	Secondary woodland with a mix of scrub, semi-improved neutral grassland, ditches and hedges	6
PRoW around Bayhurst Wood and St Leonards Farm (barn owl survey visit)	TQ067 883	Ancient deciduous woodland, hedgerows and agricultural land	6

# 4.4 Baseline

## CFA1 - CFA6

4.4.1 Table 10 to Table 14 details the protected and/or notable bird records from field surveys undertaken in CFA1 through to CFA6 inclusive

## Appendix EC-002-001

Table 10 Protected and/or notable bird records from field surveys undertaken in CFA1

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 000001	Lesser black- backed gull	Larus fuscus	Amber List	St James's Gardens	TQ 293 827 (central grid ref)	6	3	Between 1 and 6 birds recorded on three dates during the survey period. Probably breeds on site on industrial/commercial building roofs.
010-BB3- 000002	Herring gull	Larus argentatus	Red List	St James's Gardens	TQ 293 827 (central grid ref)	18	6	Between 1 and 18 birds recorded on 6 dates during the survey period. Confirmed breeding on site on industrial/commercial building roofs.
010-BB3- 000003	Starling	Sturnus vulgaris	Red List	St James's Gardens	TQ 293 827 (central grid ref)	6	4	Between 2 and 6 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 000004	House sparrow	Passer domesticus	Red List	St James's Gardens	TQ 293 827 (central grid ref)	7	4	Between 2 and 7 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 000005	Grey wagtail	Motacilla cinerea	Amber List	St James's Gardens	TQ 293 827 (central grid ref)	1	2	One bird recorded on 13 May 2013 with another on 10 June 2013. Probably breeds on site.

Table 11 Protected and/or notable bird records from field surveys undertaken in CFA2 and CFA3

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was	Further details
010-BB3- 001001	Mallard	Anas platyrhynchos	Amber List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	23	recorded 7	Between 5 and 23 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010-BB3- 001002	Tufted duck	Aythya fuligula	Amber List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	8	4	Between 1 and 8 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 001003	Black- headed gull	Chroicocephalus ridibundus	Amber List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	97	3	Between 3 and 97 birds recorded on three dates during the survey period. Passage migrant, does not breed on site.
010-BB3- 001004	Herring gull	Larus argentatus	Red List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300834 (linear grid ref)	17	7	Between 3 and 17 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010-BB3- 001005	Yellow- legged gull	Larus michahellis	Amber List	London's Grand Union Canal (spans CFA2 and 3)	TQ 284 839	1	1	One bird recorded on 22 March 2013. The record involved a displaying adult seen on buildings at TQ284839 but not seen again. It is possible that it was a herring gull x lesser black-backed hybrid.
010-BB3- 001006	Common tern	Sterna hirundo	Amber List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	1	1	One bird recorded on 10 June 2013. Seen using the site but not considered to breed within it.
010-BB3- 001007	Stock dove	Columba oenas	Amber List	London's Grand Union Canal (spans CFA2 and	TQ 279 835-TQ 300 834 (linear grid ref)	2	1	2 birds recorded on o8 April 2013. Probably breeds on site.

Ecology survey code	Common name	Latin name	Status	Location 3)	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 001008	Swift	Apus apus	Amber List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	13	3	Between 1 and 13 birds recorded on three dates during the survey period. Flyover records only, not considered to breed on site.
010-BB3- 001009	Starling	Sturnus vulgaris	Red List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	34	7	Between 2 and 34 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010-BB3- 001010	Song thrush	Turdus philomelos	Red List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	1	1	One bird recorded on 10 June 2013. Probably breeds on site.
010-BB3- 001011	Dunnock	Prunella modularis	Amber List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	6	6	Between 1 and 6 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 001012	House sparrow	Passer domesticus	Red List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	12	7	Between 5 and 12 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010-BB3- 001013	Grey wagtail	Motacilla cinerea	Amber List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	5	6	Between 1 and 5 birds recorded on 6 dates during the survey period. Confirmed breeding on site
010-BB3- 001014	Linnet	Carduelis cannabina	Red List	London's Grand Union Canal (spans CFA2 and	TQ 279 835-TQ 300 834 (linear grid ref)	1	1	One bird recorded on 13 May 2013. Flyover record only, not considered to breed on site.

Ecology survey code	Common name	Latin name	Status	Location 3)	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 001015	Lesser redpoll	Carduelis cabaret	Red List	London's Grand Union Canal (spans CFA2 and 3)	TQ 279 835-TQ 300 834 (linear grid ref)	2	1	2 birds recorded on o8 April 2013. Passage migrant, does not breed on site.
010-BB3- 001016	Starling	Sturnus vulgaris	Red List	Camden Gardens	TQ 289 842 (central grid ref)	2	1	2 birds recorded on 24 June 2013. Probably breeds on site.
010-BB3- 001017	Dunnock	Prunella modularis	Amber List	Camden Gardens	TQ 289 842 (central grid ref)	1	1	One bird recorded on 16 July 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 001018	House sparrow	Passer domesticus	Red List	Camden Gardens	TQ 289 842 (central grid ref)	2	1	2 birds recorded on 08 July 2013. Possibly breeds, suitable habitat but not confirmed.

#### Table 12 Protected and/or notable bird records from field surveys undertaken in CFA4

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010- BB3- 009007	Mallard	Anas platyrhynchos	Amber List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	16	6	Between 2 and 16 birds recorded on 6 dates during the survey period. Confirmed breeding on site.

Ecology survey code	Common name Pochard	Latin name  Aythya ferina	Status	London's Grand	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	One bird recorded on 08 July 2013. Passage migrant, does
BB <sub>3</sub> - 009008			List	Union Canal (Old Oak Common Section)	TQ232823 (linear grid ref)			not breed on site.
010- BB3- 009009	Tufted duck	Aythya fuligula	Amber List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	2	1	2 birds recorded on 08 July 2013. Confirmed breeding on site.
010- BB3- 009010	Little grebe	Tachybaptus ruficollis	Amber List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	1	1	One bird recorded on 20 March 2013. Possibly breeds, suitable habitat but not confirmed.
010- BB3- 009011	Peregrine	Falco peregrinus	Schedule 1 and Annex 1	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	1	1	One bird recorded on 24 June 2013. Flyover records only, not considered to breed on site.
010- BB3- 009012	Black-headed gull	Chroicocephalus ridibundus	Amber List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	56	2	56 birds recorded on 20 March 2013 with 6 more on 08 July 2013. Passage migrant, does not breed on site.
010- BB3- 009013	Common gull	Larus canus	Amber List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	7	1	7 birds recorded on 20 March 2013. Passage migrant, does not breed on site.
010- BB3- 009014	Lesser Black- backed gull	Larus fuscus	Amber List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	6	4	Between 1 and 6 birds recorded on 4 dates during the survey period. Probably breeds on site.

Ecology survey code	Common name  Herring gull	Latin name  Larus argentatus	Status  Red List	Location  London's Grand	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details  Between 1 and 7 birds recorded on 5 dates during the
BB <sub>3</sub> - 009015	. 33.			Union Canal (Old Oak Common Section)	TQ232823 (linear grid ref)	,		survey period. Probably breeds on site.
010- BB3- 009016	Common tern	Sterna hirundo	Red List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	1	1	One bird recorded on o8 July 2013. Seen using the site but not considered to breed within it.
010- BB3- 009017	Starling	Sturnus vulgaris	Red List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	4	3	Between 2 and 4 birds recorded on three dates during the survey period. Confirmed breeding on site.
010- BB3- 009018	Song thrush	Turdus philomelos	Red List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	1	2	One bird recorded on 20 March 2013 with another on 13 May 2013. Probably breeds on site.
010- BB3- 009019	Dunnock	Prunella modularis	Amber List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	10	5	Between 3 and 10 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010- BB3- 009020	House sparrow	Passer domesticus	Red List	London's Grand Union Canal (Old Oak Common Section)	TQ216824- TQ232823 (linear grid ref)	3	3	3 birds recorded on 30 April 2013 with 2 more on 08 July 2013. Probably breeds on site.
010- BB3- 009021	Linnet	Carduelis cannabina	Red List	London's Grand Union Canal (Old Oak Common	TQ216824- TQ232823 (linear grid	2	1	2 birds recorded on 30 April 2013. Possibly breeds, suitable habitat but not confirmed.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				Section)	ref)			
010- BB3- 008002	Mallard	Anas platyrhynchos	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	2	1	2 birds recorded on 15 April 2013. Flyover record only, not considered to breed on site.
010- BB3- 008003	Kestrel	Falco tinnunculus	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	3	3	Between 1 and 3 birds recorded on three dates during the survey period. Probably breeds on site.
010- BB3- 008004	Black-headed gull	Chroicocephalus ridibundus	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	263	1	263 birds recorded on 18 March2013. Passage migrant, does not breed on site.
010- BB3- 008005	Common gull	Larus canus	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	30	1	30 birds recorded on 18 March 2013. Passage migrant, does not breed on site.
010- BB3- 008006	Herring gull	Larus argentatus	Red List	Wormwood Scrubs	TQ222817 (central grid ref)	12	6	Between 1 and 12 birds recorded on 6 dates during the survey period. Seen using the site but not considered to breed within it.
010- BB3- 008007	Stock dove	Columba oenas	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	23	5	Between 1 and 23 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010- BB3- 008008	Swift	Apus apus	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	39	4	Between 2 and 39 birds recorded on 4 dates during the survey period. Flyover records only, not considered to breed on site.
010- BB3- 008009	Green woodpecker	Picus viridis	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	3	1	3 birds recorded on 15 April 2013. Probably breeds on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010- BB3- 008010	Skylark	Alauda arvensis	Red List	Wormwood Scrubs	TQ222817 (central grid ref)	1	1	One bird recorded on 18 March 2013. Passage migrant, not considered to breed on site.
010- BB3- 008011	Swallow	Hirundo rustica	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	12	1	12 birds recorded on 15 April 2013. Passage migrant, does not breed on site.
010- BB3- 008012	Willow warbler	Phylloscopus trochilus	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	2		2 birds recorded on 15 April 2013. Passage migrant, is not thought to breed on site.
010- BB3- 008013	Whitethroat	Sylvia communis	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	13	6	Between 3 and 13 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010- BB3- 008014	Starling	Sturnus vulgaris	Red List	Wormwood Scrubs	TQ222817 (central grid ref)	126	7	Between 15 and 126 birds recorded on 7 dates during the survey period. Confirmed breeding on site. Uses houses/buildings to nest in.
010- BB3- 008016	Song thrush	Turdus philomelos	Red List	Wormwood Scrubs	TQ222817 (central grid ref)	20	7	Between 6 and 20 birds recorded on 7 dates during the survey period. Confirmed breeding on site. Trees, hedgerows and scrub, often in gardens.
010- BB3- 008018	Mistle thrush	Turdus viscivorus	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	2	1	2 birds recorded on 09 July 2013. Possibly breeds, suitable habitat but not confirmed.
010- BB3- 008019	Redstart	Phoenicurus phoenicurus	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	13	1	13 birds recorded on 15 April 2013. Passage migrant, does not breed on site. A notable arrival of this scarce passage migrant through the London area.
010- BB3-	Wheatear	Oenanthe oenanthe	Amber List	Wormwood Scrubs	TQ222817 (central grid	30	1	30 birds recorded on 15 April 2013. Passage migrant, does not breed on site. A notable arrival of this passage migrant

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
008020					ref)			through the London area.
010- BB <sub>3</sub> - 008021	Dunnock	Prunella modularis	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	26	7	Between 8 and 26 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010- BB3- 008022	House sparrow	Passer domesticus	Red List	Wormwood Scrubs	TQ222817 (central grid ref)	37	7	Between 12 and 37 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010- BB3- 008023	Meadow pipit	Anthus pratensis	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	19	7	Between 3 and 19 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010- BB3- 008024	Linnet	Carduelis cannabina	Red List	Wormwood Scrubs	TQ222817 (central grid ref)	15	6	Between 2 and 15 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010- BB3- 008025	Lesser redpoll	Carduelis cabaret	Red List	Wormwood Scrubs	TQ222817 (central grid ref)	1	1	One bird recorded on 15 April 2013. Passage migrant, does not breed on site.
010- BB3- 008026	Bullfinch	Pyrrhula pyrrhula	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	2	2	2 birds recorded on 14 May 2013 with 2 more on 25 June 2013. Probably breeds on site
010- BB3- 008027	Reed bunting	Emberiza schoeniclus	Amber List	Wormwood Scrubs	TQ222817 (central grid ref)	1	2	One bird recorded on 18 March 2013 with another on 25 June 2013. Possibly breeds, suitable habitat but not confirmed. Uses dykes, hedgerow and scrub to nest in, usually near water but sometimes in dryer habitat.
010- BB3- 008028	Mallard	Anas platyrhynchos	Amber List	Little Wormwood Scrubs and Railway	TQ229819 (central grid ref)	1	1	One bird recorded on 13 May 2013. Flyover records only, not considered to breed on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010- BB3- 008029	Black-headed gull	Chroicocephalus ridibundus	Amber List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	28	2	28 birds recorded on 19 March 2013 with 9 more on 09 April 2013. Passage migrant, does not breed on site.
010- BB3- 008030	Common gull	Larus canus	Amber List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	1	2	One bird recorded on 19 March 2013 with another on 09 April 2013. Passage migrant, does not breed on site.
010- BB3- 008031	Lesser black- backed gull	Larus fuscus	Amber List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	5	1	5 birds recorded on 13 May 2013. Flyover records only, not considered to breed on site.
010- BB3- 008032	Herring gull	Larus argentatus	Red List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	2	4	Between 1 and 2 birds recorded on 4 dates during the survey period. Flyover records only, not considered to breed on site.
010- BB3- 008033	Stock dove	Columba oenas	Amber List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	2	1	2 birds recorded on o8 July 2013. Probably breeds on site. Nests in mature woodland and copses.
010- BB3- 008034	Swift	Apus apus	Amber List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	1	1	One bird recorded on 24 June 2013. Flyover records only, not considered to breed on site.
010- BB3-	Green	Picus viridis	Amber	Little Wormwood Scrubs and	TQ229819 (central grid	1	1	Single bird recorded on three dates during the survey period. Probably breeds on site. Nests in mature woodland

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
008035	woodpecker		List	Railway Embankment	ref)			and copses.
010- BB3- 008036	Swallow	Hirundo rustica	Amber List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	1	2	One bird recorded on 09 April 2013 with another on 13 May 2013. Passage migrant, does not breed on site.
010- BB3- 008037	Whitethroat	Sylvia communis	Amber List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	8	4	Between 2 and 8 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010- BB3- 008038	Starling	Sturnus vulgaris	Red List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	33	7	Between 1 and 33 birds recorded on 7 dates during the survey period. Possibly breeds, suitable habitat but not confirmed.
010- BB3- 008039	Song thrush	Turdus philomelos	Red List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	6	6	Between 3 and 6 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010- BB3- 008040	Dunnock	Prunella modularis	Amber List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	13	7	Between 2 and 13 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010- BB3- 008041	House sparrow	Passer domesticus	Red List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	2	4	Between 1 and 2 birds recorded on 4 dates during the survey period. Possibly breeds, suitable habitat but not confirmed.
010-	Meadow pipit	Anthus pratensis	Amber	Little Wormwood	TQ229819	1	1	One bird recorded on 19 March 2013. Passage migrant,

Ecology	Common name	Latin name	Status	Location	OS grid	Peak count of	Number of	Further details
survey code					reference	individuals across all	surveys during which	
code						survey visits	species was	
						Solvey visits	recorded	
BB3- 008042			List	Scrubs and Railway Embankment	(central grid ref)			does not breed on site.
010- BB3- 008043	Linnet	Carduelis cannabina	Red List	Little Wormwood Scrubs and Railway Embankment	TQ229819 (central grid ref)	1	1	One bird recorded on 24 June 2013. Flyover records only, not considered to breed on site.
010- BB3- 008044	Lesser black- backed gull	Larus fuscus	Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	5	4	Between 1 and 5 birds recorded on 4 dates during the survey period. Flyover records only, not considered to breed on site.
010- BB3- 008045	Herring gull	Larus argentatus	Red List	St Mary's RC Cemetery	TQ226824 (central grid ref)	3	1	3 birds recorded on 21 May 2013. Flyover record only, not considered to breed on site.
010- BB3- 008046	Stock dove	Columba oenas	Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	2	1	2 birds recorded on 21 May 2013. Probably nests on site.
010- BB3- 008047	Swift	Apus apus	Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	13	4	Between 1 and 13 birds recorded on 4 dates during the survey period. Flyover records only, not considered to breed on site.
o10- BB3- o08048	Green woodpecker	Picus viridis	Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	1	1	One bird recorded on 10 July 2013. Possibly breeds, suitable habitat but not confirmed.
o10- BB3- o08049	Swallow	Hirundo rustica	Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	5	1	5 birds recorded on 03 May 2013. Passage migrant, does not breed on site.
010-	Whitethroat	Sylvia communis	Amber	St Mary's RC	TQ226824	3	3	Between 1 and 3 birds recorded on three dates during the

Ecology	Common name	Latin name	Status	Location	OS grid	Peak count of	Number of	Further details
survey					reference	individuals	surveys	
code						across all	during which	
						survey visits	species was	
				_			recorded	
BB <sub>3</sub> - 008050			List	Cemetery	(central grid ref)			survey period. Confirmed breeding on site.
010- BB3- 008051	Starling	Sturnus vulgaris	Red List	St Mary's RC Cemetery	TQ226824 (central grid ref)	39	5	Between 1 and 39 birds recorded on 5 dates during the survey period. Probably breeds on site.
010- BB3- 008052	Song thrush	Turdus philomelos	Red List	St Mary's RC Cemetery	TQ226824 (central grid ref)	1	1	One bird recorded on 10 July 2013. Possibly breeds, suitable habitat but not confirmed. Trees, hedgerows and scrub, often in gardens.
010- BB3- 008053	Mistle thrush	Turdus viscivorus	Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	1	1	One bird recorded on 26 June 2013. Possibly breeds, suitable habitat but not confirmed.
010- BB3- 008054	Black redstart	Phoenicurus ochruros	Schedule 1 and Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	1	6	A single bird recorded on 6 dates during the survey period. Probably breeds on site. Nests on industrial/commercial building and waste ground, usually in urban areas. A territorial first summer male was present all summer along the western edge of St Mary's Cemetery. No mate was seen but the bird was clearly holding territory in the area and on the industrial buildings immediately adjacent to the cemetery.
010- BB <sub>3</sub> - 008055	Dunnock	Prunella modularis	Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	2	4	Between 1 and 2 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010- BB <sub>3</sub> - 008056	House sparrow	Passer domesticus	Red List	St Mary's RC Cemetery	TQ226824 (central grid ref)	7	5	Between 2 and 7 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010- BB3-	Yellow wagtail	Motacilla flava	Red List	St Mary's RC Cemetery	TQ226824 (central grid	1	1	One bird recorded flying over on 03 May 2013. Passage migrant, does not breed on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
008057					ref)			
010- BB3- 008058	Meadow pipit	Anthus pratensis	Amber List	St Mary's RC Cemetery	TQ226824 (central grid ref)	3	1	3 birds recorded on 03 May 2013. No evidence of subsequent breeding, passage migrant.
010- BB3- 008059	Linnet	Carduelis cannabina	Red List	St Mary's RC Cemetery	TQ226824 (central grid ref)	14	5	Between 2 and 14 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010- BB3- 008060	Mallard	Anas platyrhynchos	Amber List	Kensal Green RC Cemetery	TQ229825 (central grid ref)	4	3	Between 2 and 4 birds recorded on three dates during the survey period. Confirmed breeding on site. Usually nests near water but can breed in dry habitats.
010- BB3- 008061	Kestrel	Falco tinnunculus	Amber List	Kensal Green Cemetery	TQ229825 (central grid ref)	2	1	2 birds recorded on 21 March 2013. Possibly breeds, suitable habitat but not confirmed. Nests in mature woodland and copses or sometimes on buildings.
010- BB <sub>3</sub> - 007002	Peregrine	Falco peregrinus	Schedule 1 and Annex	Kensal Green Cemetery	TQ229825 (central grid ref)	1	1	One bird recorded on 20 May 2013. Flyover record only, not considered to breed on site
010- BB3- 007003	Black-headed gull	Chroicocephalus ridibundus	Amber List	Kensal Green Cemetery	TQ229825 (central grid ref)	7	1	7 birds recorded on 21 March 2013. Passage migrant, does not breed on site.
010- BB3- 007001	Lesser black- backed gull	Larus fuscus	Amber List	Kensal Green Cemetery	TQ229825 (central grid ref)	1	2	One bird recorded on 20 May 2013 with another on 12 June 2013. Flyover records only, not considered to breed on site.
010- BB3- 007004	Herring gull	Larus argentatus	Red List	Kensal Green Cemetery	TQ229825 (central grid ref)	3	5	Between 1 and 3 birds recorded on 5 dates during the survey period. Flyover records only, not considered to breed on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010- BB3- 007005	Stock dove	Columba oenas	Amber List	Kensal Green Cemetery	TQ229825 (central grid ref)	13	6	Between 2 and 13 birds recorded on 6 dates during the survey period. Confirmed breeding on site. Nests in mature woodland and copses.
010- BB3- 007006	Swift	Apus apus	Amber List	Kensal Green Cemetery	TQ229825 (central grid ref)	5	2	3 birds recorded on 26 June 2013 with 5 more on 10 July 2013. Flyover records only, not considered to breed on site.
010- BB3- 007007	Green woodpecker	Picus viridis	Amber List	Kensal Green Cemetery	TQ229825 (central grid ref)	7	6	Between 1 and 7 birds recorded on 6 dates during the survey period. Confirmed breeding on site. Nests in mature woodland and copses.
010- BB3- 007008	Starling	Sturnus vulgaris	Red List	Kensal Green Cemetery	TQ229825 (central grid ref)	16	6	Between 3 and 16 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010- BB3- 007010	Song thrush	Turdus philomelos	Red List	Kensal Green Cemetery	TQ229825 (central grid ref)	9	7	Between 1 and 9 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010- BB3- 007012	Mistle thrush	Turdus viscivorus	Amber List	Kensal Green Cemetery	TQ229825 (central grid ref)	4	3	Between 1 and 4 birds recorded on three dates during the survey period. Confirmed breeding on site.
010- BB3- 007013	Dunnock	Prunella modularis	Amber List	Kensal Green Cemetery	TQ229825 (central grid ref)	7	7	Between 1 and 7 birds recorded on 7 dates during the survey period. Confirmed breeding on site.

Table 13 Protected and/or notable bird records from field surveys undertaken in CFA 5  $\,$ 

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 012001	Mallard	Anas platyrhynchos	Amber List	Network Rail land within 25om of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	4	2	4 birds recorded on 03 April 2013 with 2 more on 22 May 2013. Probably breeds on site.
010-BB3- 012002	Black-headed gull	Chroicocephalus ridibundus	Amber List	Network Rail land within 250m of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	30	2	30 birds recorded on 03 April 2013 with 20 more on 11 July 2013. Passage migrant, does not breed on site.
010-BB3- 012003	Common gull	Larus canus	Amber List	Network Rail land within 250m of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	2	1	2 birds recorded on 03 April 2013. Passage migrant, does not breed on site.
010-BB3- 012004	Lesser black- backed gull	Larus fuscus	Amber List	Network Rail land within 25om of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	14	6	Between 1 and 14 birds recorded on 6 dates during the survey period. Probably breeds on site.
010-BB3- 012005	Herring gull	Larus argentatus	Red List	Network Rail land within 250m of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	14	6	Between 5 and 14 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 012006	Stock dove	Columba oenas	Amber List	Network Rail land within 25om of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	2	1	2 birds recorded on 19 June 2013. Flyover record only, not considered to breed on site.

010-BB3- 012007	Swift	Apus apus	Amber List	Network Rail land within 250m of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	6	3	Between 3 and 6 birds recorded on three dates during the survey period. Flyover records only, not considered to breed on site.
010-BB3- 012008	Starling	Sturnus vulgaris	Red List	Network Rail land within 250m of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	99	5	Between 2 and 99 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 012009	Dunnock	Prunella modularis	Amber List	Network Rail land within 250m of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	5	6	Between 2 and 5 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 012010	Grey wagtail	Motacilla cinerea	Amber List	Network Rail land within 250m of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	2	2	One bird recorded on 22 May 2013 with 2 more on 19 June 2013. Probably breeds on site.
010-BB3- 012011	Linnet	Carduelis cannabina	Red List	Network Rail land within 250m of Hanger Lane vent shaft main compound, Ealing	TQ182826 (central grid ref)	2	1	2 birds recorded on 19 June 2013. Probably breeds on site.
010-BB3- 015001	Mallard	Anas platyrhynchos	Amber List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	3	1	3 birds recorded on 22 May 2013
010-BB3- 015002	Kestrel	Falco tinnunculus	Amber List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	1	1	One bird recorded on 03 April 2013. Probably breeds on site.
010-BB3- 015003	Black-headed gull	Chroicocephalus ridibundus	Amber List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	2	1	2 birds recorded on 11 July 2013. Passage migrant, does not breed on site.

010-BB3- 015004	Lesser black- backed gull	Larus fuscus	Amber List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	12	6	Between 5 and 12 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 015005	Herring gull	Larus argentatus	Red List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	24	6	Between 2 and 24 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 015006	Stock dove	Columba oenas	Amber List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	1	2	One bird recorded on 22 April 2013 with another on 22 May 2013. Probably breeds on site. Trees and mature hedgerows.
010-BB3- 015007	Swift	Apus apus	Amber List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	42	4	Between 2 and 42 birds recorded on 4 dates during the survey period. Probably breeds on site.
010-BB3- 015008	Green woodpecker	Picus viridis	Amber List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	2	4	Between 1 and 2 birds recorded on 4 dates during the survey period. Confirmed breeding on site. Trees, hedgerows and scrub, often in gardens.
010-BB3- 015009	Whitethroat	Sylvia communis	Amber List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	3	5	Between 1 and 3 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 015010	Starling	Sturnus vulgaris	Red List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	18	3	Between 3 and 18 birds recorded on three dates during the survey period. Confirmed breeding on site.
010-BB3- 015011	Song thrush	Turdus philomelos	Red List	Network Rail land within 250m of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	2	4	Between 1 and 2 birds recorded on 4 dates during the survey period. Confirmed breeding on site.

010-BB3- 015012	Dunnock	Prunella modularis	Amber List	Network Rail land within 25om of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	10	6	Between 3 and 10 birds recorded on 6 dates during the survey period. Confirmed breeding on site. Breeds in hedgerow, waste areas and scrub.
010-BB3- 015013	House sparrow	Passer domesticus	Red List	Network Rail land within 25om of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	10	5	Between 1 and 10 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 015014	Linnet	Carduelis cannabina	Red List	Network Rail land within 25om of Greenpark Way, vent vent shaft main compound, Greenford	TQ153837 (central grid ref)	3	3	Between 2 and 3 birds recorded on three dates during the survey period. Probably breeds on site.
010-BB3- 017001	Mallard	Anas platyrhynchos	Amber List	Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	1	2	One bird recorded on 04 April 2013 with another on 23 April 2013. Flyover records only, not considered to breed on site.
010-BB3- 017002	Black-headed gull	Chroicocephalus ridibundus	Amber List	Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	3	1	3 birds recorded on 04 April 2013. Passage migrant, does not breed on site.
010-BB3- 017003	Lesser black- backed gull	Larus fuscus	Amber List	Network Rail land within 250m of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	9	5	Between 1 and 9 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 017004	Herring gull	Larus argentatus	Red List	Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	23	5	Between 5 and 23 birds recorded on 5 dates during the survey period. Confirmed breeding on site. Nests on industrial and commercial building roofs.
010-BB3- 017005	Swift	Apus apus	Amber List	Network Rail land within 250m of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	18	2	18 birds recorded on 03 June 2013 with 18 more on 20 June 2013. Probably breeds on site. Uses houses and buildings to nest in.

010-BB3- 017006	Green woodpecker	Picus viridis	Amber List	Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	2	2	One bird recorded on 04 April 2013 with 2 more on 23 April 2013. Probably breeds on site.
010-BB3- 017007	House martin	Delichon urbica	Amber List	Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	1	1	One bird recorded on 03 June 2013. Flyover records only, not considered to breed on site.
010-BB3- 017008	Whitethroat	Sylvia communis	Amber List	Network Rail land within 250m of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	1	4	Single bird recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 017009	Starling	Sturnus vulgaris	Red List	Network Rail land within 250m of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	20	4	Between 1 and 20 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 017010	Song thrush	Turdus philomelos	Red List	Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	5	3	Between 2 and 5 birds recorded on three dates during the survey period. Confirmed breeding on site. Trees, hedgerows and scrub, often in gardens
010-BB3- 017011	Dunnock	Prunella modularis	Amber List	Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	5	5	Between 4 and 5 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 017012	House sparrow	Passer domesticus	Red List	Network Rail land within 250m of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	3	3	Between 2 and 3 birds recorded on three dates during the survey period. Confirmed breeding on site.
010-BB3- 017013	Linnet	Carduelis cannabina	Red List	Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing	TQ135843 (central grid ref)	1	2	One bird recorded on 03 June 2013 with another on 20 June 2013. Probably breeds on site.

010-BB3-	Bullfinch	Pyrrhula pyrrhula	Amber	Network Rail land within	TQ135843	2	1	2 birds recorded on 03 June 2013.
017014			List	250m of Mandeville Road,	(central grid			Probably breeds on site. Hedgerows
				Northolt Shaft Location,	ref)			and scrub.
				Ealing				
				J				

Table 14 Protected and/or notable bird records from field surveys undertaken in CFA6

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 024012	Hobby	Falco subbuteo	Schedule 1	Gatemead Farm	TQ072872 (central grid ref)	1	1	One bird recorded on 11 July 2013. Seen using the site but not considered to breed within it. Nests in woodland and copses especially in open farmland.
010-BB3- 024013	Green woodpecker	Picus viridis	Amber List	Gatemead Farm	TQ072872 (central grid ref)	1	1	One bird recorded on 11 July 2013. Possibly breeds, suitable habitat but not confirmed. Nests in mature woodland and copses.
010-BB <sub>3</sub> - 024014	Dunnock	Prunella modularis	Amber List	Gatemead Farm	TQ072872 (central grid ref)	1	2	One bird recorded on 25 March 2013 with another on 29 April 2013. Probably breeds on site.
010-BB3- 024015	Mallard	Anas platyrhynchos	Amber List	Land on the north- west side of Breakspear Road South	TQo72875 (central grid ref)	3	1	3 birds recorded on 25 March 2013. Flyover record only, not considered to breed on site.
010-BB3- 024005	Red kite	Milvus milvus	Schedule 1, Annex 1 and Amber List	Land on the north- west side of Breakspear Road South	TQ072875 (central grid ref)	1	2	One bird recorded on 14 June 2013 with another on 27 June 2013. Flyover records only, not considered to breed on site.
010-BB3- 024016	Kestrel	Falco tinnunculus	Amber List	Land on the north- west side of Breakspear Road	TQ072875 (central grid	3	1	3 birds recorded on 27 June 2013. Possibly breeds, suitable habitat but not confirmed.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				South	ref)			
010-BB3- 024017	Hobby	Falco subbuteo	Schedule 1	Land on the north- west side of Breakspear Road South	TQo72875 (central grid ref)	1	1	One bird recorded on 11 July 2013. Flyover record only, not considered to breed on site.
010-BB3- 024018	Lesser black- backed gull	Larus fuscus	Amber List	Land on the north- west side of Breakspear Road South	TQ072875 (central grid ref)	1	1	One bird recorded on 14 June 2013. Flyover record only, not considered to breed on site.
010-BB3- 024019	Herring gull	Larus argentatus	Red List	Land on the north- west side of Breakspear Road South	TQ072875 (central grid ref)	4	1	4 birds recorded on 25 March 2013. Flyover record only, not considered to breed on site.
010-BB3- 024020	Stock dove	Columba oenas	Amber List	Land on the north- west side of Breakspear Road South	TQo72875 (central grid ref)	4	5	Between 2 and 4 birds recorded on 5 dates during the survey period. Probably breeds on site.
010-BB3- 024001	Cuckoo	Cuculus canorus	Red List	Land on the north- west side of Breakspear Road South	TQ072875 (central grid ref)	1	1	One bird recorded on 29 April 2013. Presumed passage migrant, not considered to have bred on site.
010-BB3- 024021	Green woodpecker	Picus viridis	Amber List	Land on the north- west side of Breakspear Road South	TQo72875 (central grid ref)	2	3	Between 1 and 2 birds recorded on three dates during the survey period. Confirmed breeding on site.
010-BB3- 024022	Swallow	Hirundo rustica	Amber List	Land on the north- west side of Breakspear Road	TQ072875 (central grid	12	3	Between 1 and 12 birds recorded on three dates during the survey period. Seen using the site but

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				South	ref)			not considered to have bred within it.
010-BB3- 024023	Willow warbler	Phylloscopus trochilus	Amber List	Land on the north- west side of Breakspear Road South	TQ072875 (central grid ref)	2	1	2 birds recorded on 29 April 2013. Possibly breeds, suitable habitat but not confirmed, possibly passage migrants
010-BB3- 024024	Whitethroat	Sylvia communis	Amber List	Land on the north- west side of Breakspear Road South	TQ072875 (central grid ref)	1	2	One bird recorded on 14 June 2013 with another on 27 June 2013. Probably breeds on site.
010-BB3- 024025	Starling	Sturnus vulgaris	Red List	Land on the north- west side of Breakspear Road South	TQo72875 (central grid ref)	17	2	6 birds recorded on 25 March 2013 with 17 more on 11 April 2013. Seen using the site but not considered to breed within it.
010-BB3- 024027	Song thrush	Turdus philomelos	Red List	Land on the north- west side of Breakspear Road South	TQo72875 (central grid ref)	3	5	Between 1 and 3 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 024029	Mistle thrush	Turdus viscivorus	Amber List	Land on the north- west side of Breakspear Road South	TQo72875 (central grid ref)	1	1	One bird recorded on 11 April 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 024030	Dunnock	Prunella modularis	Amber List	Land on the north- west side of Breakspear Road South	TQo72875 (central grid ref)	8	7	Between 1 and 8 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010-BB3- 024031	Meadow pipit	Anthus pratensis	Amber List	Land on the north- west side of Breakspear Road	TQ072875 (central grid ref)	3	1	3 birds recorded on 25 March 2013. Flyover records only, not considered to breed on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				South				
010-BB3- 024032	Bullfinch	Pyrrhula pyrrhula	Amber List	Land on the north- west side of Breakspear Road South	TQ072875 (central grid ref)	2	4	Between 1 and 2 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 024033	Mallard	Anas platyrhynchos	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	6	1	6 birds recorded on 22 May 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 024006	Red kite	Milvus milvus	Schedule 1, Annex 1 and Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	1	1	One bird recorded on 27 June 2013. Flyover record only, not considered to breed on site.
010-BB3- 024034	Kestrel	Falco tinnunculus	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	1	1	One bird recorded on 22 May 2013. Flyover record only, not considered to breed on site.
010-BB3- 024035	Hobby	Falco subbuteo	Schedule 1	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	1	1	One bird recorded on 29 April 2013. Flyover record only, not considered to breed on site.
010-BB3- 024036	Black-headed gull	Chroicocephalus ridibundus	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	2	1	2 birds recorded on 25 March 2013. Passage migrant, does not breed on site.
010-BB3- 024037	Herring gull	Larus argentatus	Red List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	1	1	One bird recorded on 29 April 2013. Flyover record only, not considered to breed on site.
010-BB3- 024038	Stock dove	Columba oenas	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	2	2	One bird recorded on 29 April 2013 with 2 more on 11 July 2013. Probably breeds on site. Nests in mature woodland and copses.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 024039	Swift	Apus apus	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	8	2	2 birds recorded on 22 May 2013 with 8 more on 14 June 2013. Flyover records only, not considered to breed on site.
010-BB3- 024040	Kingfisher	Alcedo atthis	Schedule 1, Annex 1 and Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	1	4	Bird/s recorded on four dates during the survey period. Confirmed breeding in a hole in the riverbank just to the south of the site. However, the breeding territory normally extends to about 500 m either side of the nest site and as such impinges on the survey area.
010-BB3- 024041	Green woodpecker	Picus viridis	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	1	3	Single bird recorded on three dates during the survey period. Probably breeds on site.
010-BB3- 024042	Swallow	Hirundo rustica	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	2	1	2 birds recorded on 29 April 2013. Flyover record only, not considered to breed on site.
010-BB3- 024043	Whitethroat	Sylvia communis	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	6	5	Between 3 and 6 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 024044	Starling	Sturnus vulgaris	Red List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	13	3	Between 2 and 13 birds recorded on three dates during the survey period. Seen using the site but not considered to breed within it.
010-BB3- 024045	Song thrush	Turdus philomelos	Red List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	5	4	Between 1 and 5 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 024046	Mistle thrush	Turdus viscivorus	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	2	1	2 birds recorded on 22 May 2013. Possibly breeds, suitable habitat but not confirmed.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 024047	Dunnock	Prunella modularis	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	4	6	Between 2 and 4 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 024048	House sparrow	Passer domesticus	Red List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	3	1	3 birds recorded on 27 June 2013. Confirmed breeding on site.
010-BB3- 024049	Grey wagtail	Motacilla cinerea	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	1	1	One bird recorded on 25 March 2013. Passage migrant, does not breed on site.
010-BB3- 024050	Bullfinch	Pyrrhula pyrrhula	Amber List	Land on the east side of Breakspear Road South	TQ072870 (central grid ref)	2	3	Between 1 and 2 birds recorded on three dates during the survey period. Confirmed breeding on site.
010-BB3- 024051	Mallard	Anas platyrhynchos	Amber List	Oak Farm	TQ074872 (central grid ref)	3	4	Between 1 and 3 birds recorded on 4 dates during the survey period. Probably breeds on site.
010-BB3- 024052	Little egret	Egretta garzetta	Amber List	Oak Farm	TQ074872 (central grid ref)	1	1	One bird recorded on 14 June 2013. Flyover record only, not considered to breed on site.
010-BB3- 024053	Red kite	Milvus milvus	Schedule 1, Annex 1 and Amber List	Oak Farm	TQ074872 (central grid ref)	1	1	One bird recorded on 25 March 2013. Flyover record only, not considered to breed on site.
010-BB3- 024054	Hobby	Falco subbuteo	Schedule 1	Oak Farm	TQ074872 (central grid ref)	1	1	One bird recorded on 27 June 2013. Flyover record only, not considered to breed on site.
010-BB3- 024055	Black-headed gull	Chroicocephalus ridibundus	Amber List	Oak Farm	TQ074872 (central grid ref)	2	1	2 birds recorded on 11 April 2013. Passage migrant, does not breed on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 024056	Common gull	Larus canus	Amber List	Oak Farm	TQ074872 (central grid ref)	12	1	12 birds recorded on 11 April 2013. Passage migrant, does not breed on site.
010-BB3- 024057	Lesser black- backed gull	Larus fuscus	Amber List	Oak Farm	TQ074872 (central grid ref)	4	1	4 birds recorded on 25 March 2013. Flyover record only, not considered to breed on site.
010-BB3- 024058	Stock dove	Columba oenas	Amber List	Oak Farm	TQ074872 (central grid ref)	2	1	2 birds recorded on 29 April 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 024059	Swallow	Hirundo rustica	Amber List	Oak Farm	TQ074872 (central grid ref)	2	1	2 birds recorded on 27 June 2013. Probably breeds on site.
010-BB3- 024060	Whitethroat	Sylvia communis	Amber List	Oak Farm	TQ074872 (central grid ref)	4	2	One bird recorded on 29 April 2013 with 4 more on 27 June 2013. Probably breeds on site
010-BB3- 024061	Starling	Sturnus vulgaris	Red List	Oak Farm	TQ074872 (central grid ref)	7	3	Between 1 and 7 birds recorded on three dates during the survey period. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 024063	Song thrush	Turdus philomelos	Red List	Oak Farm	TQ074872 (central grid ref)	2	3	Between 1 and 2 birds recorded on three dates during the survey period. Probably breeds on site.
010-BB3- 024064	Mistle thrush	Turdus viscivorus	Amber List	Oak Farm	TQ074872 (central grid ref)	1	1	One bird recorded on 29 April 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 024065	Dunnock	Prunella modularis	Amber List	Oak Farm	TQ074872 (central grid ref)	2	5	Between 1 and 2 birds recorded on 5 dates during the survey period. Confirmed breeding on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 024066	House sparrow	Passer domesticus	Red List	Oak Farm	TQ074872 (central grid ref)	2	1	2 birds recorded on 29 April 2013. Probably breeds on site.
010-BB3- 024067	Grey wagtail	Motacilla cinerea	Amber List	Oak Farm	TQ074872 (central grid ref)	1	3	Single bird recorded on three dates during the survey period. Possibly breeds, suitable habitat but not confirmed. Nests in culverts/buildings, often near water.
010-BB3- 024068	Bullfinch	Pyrrhula pyrrhula	Amber List	Oak Farm	TQ074872 (central grid ref)	1	1	One bird recorded on 22 May 2013. Possibly breeds, suitable habitat but not confirmed. Uses hedgerow and scrub to nest in.
010-BB3- 023003	Mallard	Anas platyrhynchos	Amber List	Ruislip Golf Course from Public Rights of way	TQ080871 (central grid ref)	6	5	Between 1 and 6 birds recorded on 5 dates during the survey period. Confirmed breeding on site
010-BB3- 023004	Little egret	Egretta garzetta	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	2	1	2 birds recorded on 30 April 2013. Seen using the site but not considered to breed within it.
010-BB3- 023005	Kestrel	Falco tinnunculus	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	1	1	One bird recorded on 20 March 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 023006	Black-headed gull	Chroicocephalus ridibundus	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	44	1	44 birds recorded on 20 March 2013. Passage migrant, does not breed on site.
010-BB3- 023007	Common gull	Larus canus	Amber List	Ruislip Golf Course from PRoW	TQo8o871 (central grid ref)	7	1	7 birds recorded on 20 March 2013. Passage migrant, does not breed on site.
010-BB3- 023008	Lesser black- backed gull	Larus fuscus	Amber List	Ruislip Golf Course from PRoW	TQo8o871 (central grid	2	1	2 birds recorded on 16 May 2013. Flyover records only, not considered to breed on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
					ref)			
010-BB3- 023009	Herring gull	Larus argentatus	Red List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	1	1	One bird recorded on 17 April 2013. Flyover records only, not considered to breed on site.
010-BB3- 023010	Stock dove	Columba oenas	Amber List	Ruislip Golf Course from PRoW	TQo8o871 (central grid ref)	1	2	One bird recorded on 30 April 2013 with another on 11 July 2013. Probably breeds on site.
010-BB3- 023011	Cuckoo	Cuculus canorus	Red List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	1	1	One bird recorded on 16 May 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 023012	Swift	Apus apus	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	7	2	5 birds recorded on 16 May 2013 with 7 more on 28 June 2013. Flyover records only, not considered to breed on site.
010-BB3- 023013	Green woodpecker	Picus viridis	Amber List	Ruislip Golf Course from PRoW	TQo8o871 (central grid ref)	3	6	Between 1 and 3 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 023014	Swallow	Hirundo rustica	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	6	3	Between 1 and 6 birds recorded on three dates during the survey period. Probably breeds on site.
010-BB3- 023015	Willow warbler	Phylloscopus trochilus	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	1	3	Single bird recorded on three dates during the survey period. Probably breeds on site.
010-BB3- 023016	Whitethroat	Sylvia communis	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	6	4	Between 5 and 6 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3-	Starling	Sturnus vulgaris	Red List	Ruislip Golf Course	TQo8o871 (central grid	13	3	Between 1 and 13 birds recorded on three dates during the survey period. Confirmed breeding on

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
023017				from PRoW	ref)			site. Uses houses/buildings to nest in.
010-BB3- 023018	Song thrush	Turdus philomelos	Red List	Ruislip Golf Course from PRoW	TQo8o871 (central grid ref)	6	6	Between 3 and 6 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 023020	Mistle thrush	Turdus viscivorus	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	4	5	Between 1 and 4 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 023021	Dunnock	Prunella modularis	Amber List	Ruislip Golf Course from PRoW	TQ080871 (central grid ref)	6	7	Between 1 and 6 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010-BB3- 023022	House sparrow	Passer domesticus	Red List	Ruislip Golf Course from PRoW	TQo8o871 (central grid ref)	2	3	Between 1 and 2 birds recorded on three dates during the survey period. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 023023	Grey wagtail	Motacilla cinerea	Amber List	Ruislip Golf Course from PRoW	TQo8o871 (central grid ref)	1	2	One bird recorded on 20 March 2013 with another on 11 July 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 023024	Linnet	Carduelis cannabina	Red List	Ruislip Golf Course from PRoW	TQo8o871 (central grid ref)	1	1	One bird recorded on 20 March 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 023025	Lesser redpoll	Carduelis cabaret	Red List	Ruislip Golf Course from PRoW	TQo8o871 (central grid ref)	4	1	4 birds recorded on 20 March 2013. Passage migrant, does not breed on site.
010-BB3- 024069	Stock dove	Columba oenas	Amber List	Mad Field Covert	TQo76868 (central grid ref)	2	1	2 birds recorded on 30 April 2013. Probably breeds on site.
010-BB3-	Swift	Apus apus	Amber List	Mad Field Covert	TQo76868 (central grid	5	1	5 birds recorded on 28 June 2013. Flyover record

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
024070					ref)			only, not considered to breed on site.
010-BB3- 024071	Green woodpecker	Picus viridis	Amber List	Mad Field Covert	TQo76868 (central grid ref)	2	3	Between 1 and 2 birds recorded on three dates during the survey period. Probably breeds on site.
010-BB3- 024004	Marsh tit	Poecile palustris	Red List	Mad Field Covert	TQo76868 (central grid ref)	1	1	One bird recorded on 17 April 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 024072	Starling	Sturnus vulgaris	Red List	Mad Field Covert	TQo76868 (central grid ref)	22	5	Between 1 and 22 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 024073	Song thrush	Turdus philomelos	Red List	Mad Field Covert	TQo76868 (central grid ref)	3	6	Between 1 and 3 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 024074	Mistle thrush	Turdus viscivorus	Amber List	Mad Field Covert	TQo76868 (central grid ref)	2	1	2 birds recorded on 30 April 2013. Probably breeds on site.
010-BB3- 024075	Dunnock	Prunella modularis	Amber List	Mad Field Covert	TQo76868 (central grid ref)	2	6	Between 1 and 2 birds recorded on 6 dates during the survey period. Confirmed breeding on site.
010-BB3- 024076	House sparrow	Passer domesticus	Red List	Mad Field Covert	TQo76868 (central grid ref)	2	2	2 birds recorded on 17 April 2013 with 2 more on 16 May 2013. Seen using the site but not considered to breed within it.
010-BB3- 024002	Garden warbler	Sylvia borin	Local	Mad Field Covert	TQo76868 (central grid ref)	1	1	One bird recorded on 16 May 2013. Possibly breeds, suitable habitat but breeding not confirmed.
010-BB3-	Mallard	Anas	Amber List	Copthall Farm	TQo66867 (central grid	4	5	Between 1 and 4 birds recorded on 5 dates during

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
025008		platyrhynchos			ref)			the survey period. Confirmed breeding on site.
010-BB3- 025007	Red kite	Milvus milvus	Schedule 1, Annex 1 and Amber List	Copthall Farm	TQo66867 (central grid ref)	2	1	2 birds recorded on 26 March 2013. Flyover records only, not considered to breed on site.
010-BB3- 025009	Kestrel	Falco tinnunculus	Amber List	Copthall Farm	TQo66867 (central grid ref)	1	1	One bird recorded on 19 April 2013. Possibly breeds, suitable habitat but not confirmed
010-BB3- 025010	Hobby	Falco subbuteo	Schedule 1	Copthall Farm	TQo66867 (central grid ref)	1	2+	One bird recorded on 29 April 2013 with another on 17 May 2013 and several sightings later in the breeding season. Probably breeds on site or immediately adjacent to it. Nests in abandoned Carrion Crow nests in woodland and copses especially in open farmland.
010-BB3- 025006	Lapwing	Vanellus vanellus	Red List	Copthall Farm	TQo66867 (central grid ref)	4	1	4 birds recorded on 17 May 2013. Possibly breeds, suitable habitat but not confirmed. Only seen on one date and given the conspicuous nature of the species it seems unlikely that it bred
010-BB3- 025011	Black-headed gull	Chroicocephalus ridibundus	Amber List	Copthall Farm	TQo66867 (central grid ref)	2	1	2 birds recorded on 26 March 2013. Passage migrant, does not breed on site.
010-BB3- 025012	Common gull	Larus canus	Amber List	Copthall Farm	TQo66867 (central grid ref)	6	1	6 birds recorded on 26 March 2013. Passage migrant, does not breed on site.
010-BB3- 025013	Lesser black- backed gull	Larus fuscus	Amber List	Copthall Farm	TQo66867 (central grid ref)	3	6	Between 1 and 3 birds recorded on 6 dates during the survey period. Flyover records only, not considered to breed on site.
010-BB3-	Herring gull	Larus argentatus	Red List	Copthall Farm	TQ066867	9	3	Between 3 and 9 birds recorded on three dates

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
025014					(central grid ref)			during the survey period. Flyover records only, not considered to breed on site.
010-BB3- 025015	Common tern	Sterna hirundo	Red List	Copthall Farm	TQo66867 (central grid ref)	1	1	One bird recorded on 12 July 2013. Flyover record only, not considered to breed on site.
010-BB3- 025016	Stock dove	Columba oenas	Amber List	Copthall Farm	TQo66867 (central grid ref)	4	7	Between 1 and 4 birds recorded on 7 dates during the survey period. Confirmed breeding on site.
010-BB3- 025017	Swift	Apus apus	Amber List	Copthall Farm	TQo66867 (central grid ref)	12	3	Between 6 and 12 birds recorded on three dates during the survey period. Flyover records only, not considered to breed on site.
010-BB3- 025018	Green woodpecker	Picus viridis	Amber List	Copthall Farm	TQo66867 (central grid ref)	1	3	Single bird recorded on three dates during the survey period. Probably breeds on site.
010-BB3- 025019	Skylark	Alauda arvensis	Red List	Copthall Farm	TQo66867 (central grid ref)	1	2	One bird recorded on 12 April 2013 with another on 17 May 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025020	Swallow	Hirundo rustica	Amber List	Copthall Farm	TQo66867 (central grid ref)	6	4	Between 1 and 6 birds recorded on 4 dates during the survey period. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025021	Whitethroat	Sylvia communis	Amber List	Copthall Farm	TQo66867 (central grid ref)	1	4	Single bird recorded on 4 dates during the survey period. Probably breeds on site.
010-BB3- 025022	Starling	Sturnus vulgaris	Red List	Copthall Farm	TQo66867 (central grid ref)	55	8	Between 1 and 55 birds recorded on 8 dates during the survey period. Confirmed breeding on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 025024	Song thrush	Turdus philomelos	Red List	Copthall Farm	TQo66867 (central grid ref)	2	4	Between 1 and 2 birds recorded on 4 dates during the survey period. Probably breeds on site.
010-BB3- 025026	Mistle thrush	Turdus viscivorus	Amber List	Copthall Farm	TQo66867 (central grid ref)	5	3	Between 2 and 5 birds recorded on three dates during the survey period. Confirmed breeding on site.
010-BB3- 025027	Dunnock	Prunella modularis	Amber List	Copthall Farm	TQo66867 (central grid ref	13	8	Between 2 and 13 birds recorded on 8 dates during the survey period. Confirmed breeding on site.
010-BB3- 025028	Linnet	Carduelis cannabina	Red List	Copthall Farm	TQo66867 (central grid ref	1	2	One bird recorded on 12 April 2013 with another on 28 June 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025029	Lesser redpoll	Carduelis cabaret	Red List	Copthall Farm	TQo66867 (central grid ref	3	1	3 birds recorded on 19 April 2013. Passage migrant, does not breed on site.
010-BB3- 025030	Bullfinch	Pyrrhula pyrrhula	Amber List	Copthall Farm	TQo66867 (central grid ref	1	1	One bird recorded on 12 April 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025031	Kestrel	Falco tinnunculus	Amber List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	1	2	One bird recorded on 19 March 2013 with another on 01 May 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025032	Stock dove	Columba oenas	Amber List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	1	1	One bird recorded on 12 July 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025033	Swift	Apus apus	Amber List	Highway Farm	TQo63878 (central grid ref)	26	2	26 birds recorded on 17 May 2013 with 4 more on 24 June 2013. Flyover records only, not considered to breed on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 025034	Green woodpecker	Picus viridis	Amber List	Highway Farm	TQo63878 (central grid ref)	1	1	One bird recorded on 19 March 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025035	Skylark	Alauda arvensis	Red List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	1	1	One bird recorded on 24 June 2013. Possibly breeds, suitable habitat but not confirmed
010-BB3- 025036	Swallow	Hirundo rustica	Amber List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	8	4	Between 2 and 8 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 025037	Whitethroat	Sylvia communis	Amber List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	3	3	Between 1 and 3 birds recorded on three dates during the survey period. Confirmed breeding on site
010-BB3- 025038	Starling	Sturnus vulgaris	Red List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	19	3	Between 7 and 19 birds recorded on three dates during the survey period. Confirmed breeding on site.
010-BB3- 025040	Song thrush	Turdus philomelos	Red List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	3	1	3 birds recorded on 19 March 2013. Passage migrant, does not breed on site.
010-BB3- 025042	Dunnock	Prunella modularis	Amber List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	3	4	Between 1 and 3 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 025043	House sparrow	Passer domesticus	Red List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	20	4	Between 18 and 20 birds recorded on 4 dates during the survey period. Confirmed breeding on site
010-BB3- 025044	Linnet	Carduelis cannabina	Red List	Highway Farm	TQo6 <sub>3</sub> 8 <sub>7</sub> 8 (central grid ref)	2	1	2 birds recorded on 01 May 2013. Possibly breeds, suitable habitat but not confirmed.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 025064	Raven	Corvus corax	Locally rare	Recorded from Highway Farm flying over New Years Green Covert	TQo63878 (central grid ref)	1	1	Single bird on one occasion. Flyover record only, not considered to breed within the survey area.
010-BB3- 020001	Kestrel	Falco tinnunculus	Amber List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	1	3	Single bird recorded on three dates during the survey period. Possibly breeds on site.
010-BB3- 020002	Black-headed gull	Chroicocephalus ridibundus	Amber List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	6	1	6 birds recorded on 11 July 2013. Passage migrant, does not breed on site.
010-BB3- 020003	Lesser black- backed gull	Larus fuscus	Amber List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	3	4	Between 1 and 3 birds recorded on 4 dates during the survey period. Seen using the site but not considered to breed within it.
010-BB3- 020004	Herring gull	Larus argentatus	Red List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	3	5	Between 1 and 3 birds recorded on 5 dates during the survey period. Probably breeds on site.
010-BB3-	Stock dove	Columba oenas	Amber List	Network Rail land within 250m of South	TQ109855 (central grid	3	1	3 birds recorded on 11 July 2013. Flyover records

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
020005				Ruislip Station vent shaft main compound, Hillingdon	ref)			only, not considered to breed on site.
010-BB3- 020006	Swift	Apus apus	Amber List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	11	4	Between 5 and 11 birds recorded on 4 dates during the survey period. Possibly breeds on site.
010-BB3- 020007	Green woodpecker	Picus viridis	Amber List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	1	2	One bird recorded on 25 April 2013 with another on 22 May 2013. Probably breeds on site.
010-BB3- 020008	Swallow	Hirundo rustica	Amber List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	1	1	One bird recorded on 25 April 2013. Passage migrant, does not breed on site.
010-BB3- 020009	Starling	Sturnus vulgaris	Red List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	36	5	Between 5 and 36 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3-	Mistle thrush	Turdus viscivorus	Amber List	Network Rail land within 250m of South	TQ109855 (central grid	1	2	One bird recorded on 25 April 2013 with another

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
020010				Ruislip Station vent shaft main compound, Hillingdon	ref)			on 22 May 2013. Probably breeds on site.
010-BB3- 020011	Dunnock	Prunella modularis	Amber List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	5	5	Between 1 and 5 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 020012	House sparrow	Passer domesticus	Red List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	2	2	2 birds recorded on 19 June 2013 with 2 more on 11 July 2013. Confirmed breeding on site.
010-BB3- 020013	Grey wagtail	Motacilla cinerea	Amber List	Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon	TQ109855 (central grid ref)	2	3	Between 1 and 2 birds recorded on three dates during the survey period. Probably breeds on site
010-BB3- 020026	Mallard	Anas platyrhynchos	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	4	4	Between 1 and 4 birds recorded on 4 dates during the survey period. Probably breeds on site.
010-BB3- 023027	Red kite	Milvus milvus	Schedule 1, Annex 1 and	Network Rail land between Ickenham High Road and	TQ079870 (central grid	2	1	2 birds recorded on 05 April 2013. Flyover records only, not considered to breed on site.

Ecology survey code	Common name	Latin name	Status  Amber List	Location  Breakspear Road	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
			Alliber List	South, Hillingdon	Tel)			
010-BB3- 023028	Hobby	Falco subbuteo	Schedule 1	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	1	1	One bird recorded on 05 June 2013. Flyover record only, not considered to breed on site.
010-BB3- 023029	Lapwing	Vanellus vanellus	Red List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	1	1	One bird recorded on 24 April 2013. Passage migrant, does not breed on site.
010-BB3- 023030	Black-headed gull	Chroicocephalus ridibundus	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	4	1	4 birds recorded on 04 April 2013. Passage migrant, does not breed on site.
010-BB3- 023031	Common gull	Larus canus	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	1	1	One bird recorded on 04 April 2013. Passage migrant, does not breed on site.
010-BB3- 023032	Lesser black- backed gull	Larus fuscus	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	7	1	7 birds recorded on 04 April 2013. Flyover records only, not considered to breed on site.
010-BB3- 023033	Herring gull	Larus argentatus	Red List	Network Rail land between Ickenham	TQ079870 (central grid	7	5	Between 1 and 7 birds recorded on 5 dates during the survey period. Flyover records only, not

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				High Road and Breakspear Road South, Hillingdon	ref)			considered to breed on site.
010-BB3- 023034	Stock dove	Columba oenas	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	5	4	Between 1 and 5 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 023035	Cuckoo	Cuculus canorus	Red List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	1	1	One bird recorded on 24 May 2013. Passage migrant, not considered to breed on site.
010-BB3- 023036	Swift	Apus apus	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	44	3	Between 5 and 44 birds recorded on three dates during the survey period. Probably breeds on site. Uses houses/buildings to nest in.
010-BB3- 023037	Green woodpecker	Picus viridis	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	1	3	Single bird recorded on three dates during the survey period. Probably breeds on site. Trees, hedgerows and scrub, often in gardens
010-BB3- 023038	Swallow	Hirundo rustica	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	2	1	2 birds recorded on 24 April 2013. Passage migrant, does not breed on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 023039	House martin	Delichon urbica	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	3	1	3 birds recorded on 21 June 2013. Probably breeds on site.
010-BB3- 023040	Whitethroat	Sylvia communis	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	4	4	Between 2 and 4 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 023041	Starling	Sturnus vulgaris	Red List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	38	5	Between 3 and 38 birds recorded on 5 dates during the survey period. Confirmed breeding on site. Uses houses/buildings to nest in.
010-BB3- 023042	Song thrush	Turdus philomelos	Red List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	6	5	Between 1 and 6 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 023044	Mistle thrush	Turdus viscivorus	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	6	4	Between 1 and 6 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 023045	Dunnock	Prunella modularis	Amber List	Network Rail land between Ickenham High Road and Breakspear Road	TQ079870 (central grid ref)	13	5	Between 5 and 13 birds recorded on 5 dates during the survey period. Confirmed breeding on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				South, Hillingdon				
010-BB3- 023046	House sparrow	Passer domesticus	Red List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	3	2	3 birds recorded on 05 June 2013 with 2 more on 21 June 2013. Confirmed breeding on site.
010-BB3- 023047	Linnet	Carduelis cannabina	Red List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	2	1	2 birds recorded on 05 June 2013. Probably breeds on site.
010-BB3- 023048	Bullfinch	Pyrrhula pyrrhula	Amber List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQ079870 (central grid ref)	1	2	One bird recorded on 24 May 2013 with another on 05 June 2013.
010-BB3- 023049	Yellowhammer	Emberiza citrinella	Red List	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	1	1	One bird recorded on 04 April 2013. Possibly breeds, suitable habitat but breeding not confirmed.
010-BB3- 024003	Garden warbler	Sylvia borin	Local	Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon	TQo79870 (central grid ref)	1	1	One bird recorded on 05 June 2013. Possibly breeds, suitable habitat but breeding not confirmed.
010-BB3- 025045	Mallard	Anas platyrhynchos	Amber List	Network Rail land between Breakspear Road South and	TQ066872 (central grid	2	3	Between 1 and 2 birds recorded on three dates during the survey period. Flyover records only,

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				Harvil Road, Hillingdon	ref)			not considered to breed on site.
010-BB3- 025046	Red kite	Milvus milvus	Schedule 1, Annex 1 and Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	1	1	One bird recorded on 05 April 2013. Flyover record only, not considered to breed on site.
010-BB3- 025047	Common gull	Larus canus	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	3	1	3 birds recorded on 05 April 2013. Passage migrant, does not breed on site.
010-BB3- 025048	Lesser black- backed gull	Larus fuscus	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	1	1	One bird recorded on 22 June 2013. Flyover record only, not considered to breed on site.
010-BB3- 025049	Herring gull	Larus argentatus	Red List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	10	3	Between 1 and 10 birds recorded on three dates during the survey period. Flyover records only, not considered to breed on site
010-BB3- 025050	Stock dove	Columba oenas	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	2	4	Between 1 and 2 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 025051	Cuckoo	Cuculus canorus	Red List	Network Rail land between Breakspear	TQo66872 (central grid	1	1	One bird recorded on 25 April 2013. Passage migrant, not considered to be breeding on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				Road South and Harvil Road, Hillingdon	ref)			
010-BB3- 025052	Swift	Apus apus	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	10	4	Between 2 and 10 birds recorded on 4 dates during the survey period. Flyover records only, not considered to breed on site.
010-BB3- 025053	Green woodpecker	Picus viridis	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	3	2	3 birds recorded on 25 April 2013 with 2 more on 04 June 2013. Confirmed breeding on site.
010-BB3- 025054	Swallow	Hirundo rustica	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	1	2	One bird recorded on 23 May 2013 with another on 04 June 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025055	Whitethroat	Sylvia communis	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	1	2	One bird recorded on 25 April 2013 with another on 22 June 2013.
010-BB3- 025056	Starling	Sturnus vulgaris	Red List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	1	1	One bird recorded on 04 June 2013. Possibly breeds, suitable habitat but not confirmed

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
010-BB3- 025057	Song thrush	Turdus philomelos	Red List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	5	4	Between 2 and 5 birds recorded on 4 dates during the survey period. Confirmed breeding on site.
010-BB3- 025059	Mistle thrush	Turdus viscivorus	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	1	1	One bird recorded on 22 June 2013. Possibly breeds, suitable habitat but not confirmed.
010-BB3- 025060	Dunnock	Prunella modularis	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	11	5	Between 3 and 11 birds recorded on 5 dates during the survey period. Confirmed breeding on site.
010-BB3- 025061	Meadow pipit	Anthus pratensis	Amber List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	1	1	One bird recorded on 05 April 2013. Passage migrant, does not breed on site.
010-BB3- 025062	Linnet	Carduelis cannabina	Red List	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQ066872 (central grid ref)	2	1	2 birds recorded on 22 June 2013. Probably breeds on site.
010-BB3- 025063	Bullfinch	Pyrrhula pyrrhula	Amber List	Network Rail land between Breakspear Road South and Harvil Road,	TQ066872 (central grid ref)	4	4	Between 2 and 4 birds recorded on 4 dates during the survey period. Confirmed breeding on site.

Ecology survey code	Common name	Latin name	Status	Location	OS grid reference	Peak count of individuals across all survey visits	Number of surveys during which species was recorded	Further details
				Hillingdon				
010-BB3- 025005	Garden warbler	Sylvia borin	Local	Network Rail land between Breakspear Road South and Harvil Road, Hillingdon	TQo66872 (central grid ref)	5	4	Breeds on site. Peak count recorded on 04 June 2013.

#### CFA<sub>1</sub>

#### St James's Garden

- 4.4.2 St James's Garden survey site comprises a mix of habitats. The bulk of it is a typical London square, with maintained grass, flowerbeds, some shrubs and many mature trees, these being dominated by London Plane. The site also contains a school, some office/commercial buildings, a derelict hospital and some residential housing.
- 4.4.3 The bird life is also typical of such habitats. The notable species are all common and widespread breeding birds but notable because their overall breeding populations in Great Britain have decreased markedly in recent decades. However, all are to be expected in this area and none has any great conservation significance within a London context.
- 4.4.4 A total of 20 bird species were recorded in this survey area during the 2013 breeding season. Of these, 14 species were considered to be breeding with a further four species probably doing so and one more possibly breeding. Of local interest were the grey wagtails seen feeding within the site on two occasions; a pair of these is likely to breed either within or close to the survey area. None of the populations of the species breeding within the survey area has any particular conservation significance.
- 4.4.5 Black redstart was not recorded in CFA1 during the specific surveys for this species in the Euston Station area. However, further areas of habitat which are more suitable for black redstarts, including the rail land and light industrial areas were not surveyed due to access restrictions. Black redstart could be present within these areas. Based on desk study data a conservative assumption that the species could be present has been made, and if present, they would represent more than 1% of the national population and therefore be of national importance.

#### Desk Study

4.4.6 The desk study indicated that there have been eight recordings of black redstart which is a Schedule 1 and Birds of Conservation Concern (BoCC) amber listspecies within CFA 1 all of which have been from around London St Pancras Railway Station (a long established site for black redstarts), St Pancras Gardens and Argyle Square. There are numerous records of house sparrow (on the BoCC red list), at various locations within 500m of the CCB in CFA1. There are also records of spotted flycatchers (on the BoCC red list) at St Pancras Gardens.

#### **Regents Park**

- The desk study indicated that Regent's Park supports over 100 species of birds annually including one of London's largest breeding colonies of herons and nationally significant numbers of breeding pochard. Other species of note recorded include house sparrow, reed bunting, tree pipit (BoCC red list), little egret bar-tailed godwit (BoCC amber list), spotted flycatcher, kingfisher, red kite, peregrine and hobby, although not all these records relate to breeding.
- 4.4.8 The site is of district/borough importance for its breeding bird assemblage.

#### CFA<sub>2</sub>

### Grand Union Canal (Regent's Canal around Camden)

- 4.4.9 The Regent's Canal section of the Grand Union Canal runs between Regent's Park and Camden; this is a linear site and comprises a mix of habitats dominated by the canal itself but bordered by a mixture of residential housing, commercial and retail buildings and transport infrastructure. The canal is generally bordered by modest amounts of vegetation but this increases notably in the section of the canal within Regent's Park, with a good cover of mature trees and shrubs along its banks.
- The bird life is also typical of such habitats. A total of 45 bird species were recorded in this survey area during the 2013 breeding season. Of these, 27 species were considered to be breeding with a further four species probably doing so and five more possibly breeding. The remainder were either migrants or flying over the area but not considered to be breeding within it. Although 16 notable species were recorded, 11 of which were considered to be breeding or probably breeding, most were of no particular significance within a London context, with the exception of yellow-legged gull. The rest of the notable species are generally common and widespread breeding birds but notable because their overall breeding populations in Great Britain have decreased markedly in recent decades.
- 4.4.11 The notable species recorded were all BoCC red or amber listed. The red listed species were herring gull, starling, song thrush, house sparrow, linnet and lesser redpoll and the amber listed species were mallard, tufted duck, black-headed gull, yellow-legged gull, common tern, stock dove, swift, dunnock and grey wagtail.
- 4.4.12 Of some interest were the grey wagtails confirmed breeding along the Camden Lock section of the site, plus the usual waterfowl expected on canals in the inner London area, including tufted duck, mallard, mandarin duck, coot and moorhen.
- 4.4.13 Potentially of more significance was the sighting of a gull showing the characteristics of a yellow-legged gull. This bird was displaying on a rooftop near Camden Lock in March, but was not seen subsequently. However, on the views obtained it was not possible to exclude the possibility of a lesser black-backed gull and herring gull hybrid. Both of these species also breed on roofs in this area.
- 4.4.14 None of the populations of the notable species breeding within the survey area has any particular conservation significance except for yellow-legged gull, which is a rare breeding bird in Great Britain. The likelihood of yellow-legged gull breeding is exceptionally low with few breeding attempts in the UK and with most records relating to mixed pairings<sup>9</sup>. Therefore, although the record has not been discounted, there is not enough evidence to credibly argue that this single record indicates a breeding pair of yellow-legged gull.

<sup>&</sup>lt;sup>9</sup> British Birds 105. July 2012. 352-416

#### Camden Gardens

- 4.4.15 The Camden Gardens survey site is a small London square, with maintained grass, flowerbeds, some shrubs and some mature trees. The site is bisected by a railway viaduct and is surrounded by busy roads.
- The bird life is also typical of such habitats. The notable species, such as they are, are all common and widespread breeding birds but notable because their overall breeding populations in Great Britain have decreased markedly in recent decades. However, all are to be expected in this area and none has any conservation significance within a London context. The notable species recorded at the site comprise starling and house sparrow which are BoCC red listed species, and dunnock which is an amber listed BoCC species.
- 4.4.17 A total of 10 species were recorded, not all of which were breeding. Of very local interest was jay, which breeds within the survey area. The remainder of the breeding bird community comprised common and widespread species adapted to living in a built-up environment.

## Along PRoW around and throughout Camden Town (black redstart survey visits)

4.4.18 Black redstart was not recorded during field surveys. However, further areas of habitat which are more suitable for black redstarts, including the rail land and light industrial areas were not surveyed due to access restrictions. Black redstart could be present within these areas. The numbers of breeding birds in the UK (approximately 43 pairs) are low and these areas are outside the known areas of higher concentrations of this species in London. However a conservative assumption that the species could be present has been made, and if present, they would represent more than 1% of the national population and therefore be of national importance.

## Desk Study

#### Bird Records in CFA2

The desk study indicated that there is a single record of black redstart at Jamestown Road in a residential garden, which is approximately 75m southeast of the land required for the Proposed Scheme. There is also a record of black redstart at an industrial complex along Wharf Road, adjacent to the Grand Union Canal, and this area is approximately 238m from the land required for the construction of the Proposed Scheme.

#### Network Rail land south of Primrose Hill Station

- This area constitutes rail land and associated disturbed ground and hard standing, with adjacent areas that comprise a mosaic of rough grassland, scrub and broadleaved trees within the western section of the area. These habitats could afford potentially suitable nesting opportunities for birds.
- 4.4.21 This area was not accessible for survey and therefore desk study has been used to provide an indication of the breeding bird interest at the site.

The desk study has indicated that house sparrow, which is a BoCC red listed species has been recorded at the site.

## North London Line Site of Borough Grade II Importance for Nature Conservation

- The North London Line SBI comprises the remains of the extensive 'wasteland' habitats of the former King's Cross Goods Yard, most of which has been redeveloped. The habitats at the site consist of scrub, scattered trees and patches of tall herbs and grasses.
- This area was not accessible for survey and desk study has not revealed any bird records within the area. However, the land is owned by Network Rail and there is no public access which may account for the lack of records. It is deemed that the habitat mosaic present may be used by birds during the breeding season.

#### CFA<sub>3</sub>

## London's Grand Union Canal (Regent's Canal around Camden)

4.4.25 This site is a continuation of the section of Regent's Canal detailed in CFA2 and is dealt with in CFA2.

## Along PRoW around and throughout South Hampstead (black redstart survey visits)

- 4.4.26 A total of six black redstart surveys were carried out between 09 May 2013 and 17 July 2013 along Public Rights of Way in the South Hampstead area. These surveys were conducted an hour either side of dawn in order to maximise the opportunities of locating any breeding or territorial birds whilst minimising the problems caused by traffic noise in this heavily built-up area. No black redstarts were located during these surveys.
- Black redstart was not recorded during the field surveys. However, further areas of habitat which are more suitable for black redstarts, including the rail land and light industrial areas were not surveyed due to access restrictions. Black redstart could be present within these areas. The numbers of breeding birds in the UK (approximately 43 pairs) are low and these areas are outside the known areas of higher concentrations of this species in London. However a conservative assumption that the species could be present has been made, and if present, they would represent more than 1% of the national population and therefore be of national importance.

## Desk Study

#### Breeding bird assemblage at Adelaide LNR

Field surveys have not been undertaken at the site due to access restrictions. The management plan for the site reports a total of 19 bird species recorded during breeding bird surveys undertaken in 2011, not all of which bred on the site. Of the 19 species recorded, one is BoCC red listed and two are BoCC amber listed. The restricted breeding bird community is typical of the habitats found in these urban parks, and the assemblage at the site is therefore of no more than of local importance.

#### **Notable Birds**

- 4.4.29 There are historic records of a pair of lesser redpoll breeding in a lime tree on Fairfax Road, and this road will be impacted by the Proposed Scheme. Assuming that the pair bred in a residential garden it is possible that the species still breeds in this area if the habitat has remained unchanged.
- 4.4.30 There is a record of house sparrow on Steele's Road which intersects with Fellows Road which will be subject to construction impacts.

#### CFA<sub>4</sub>

### Grand Union Canal (Old Oak Common Section)

- The Grand Union Canal (the section between Old Oak Common and Kensal Green Cemetery) is a linear site and comprises a mix of habitats dominated by the canal itself but bordered by a mixture of residential housing, commercial and retail buildings and transport infrastructure. The canal is generally bordered by modest amounts of vegetation which increases notably in the section of the canal bordering Kensal Green Cemetery, with a good cover of mature trees and shrubs along its banks. There is also some cover, especially of silver birch, in a small natural area near Canal Way.
- 4.4.32 A total of 42 bird species were recorded in this survey area during the 2013 breeding season. Of these, 24 species were considered to be breeding with a further five species probably doing so and five more possibly breeding. The remainder were either migrants or flying over the area but not considered to be breeding within it. Although 16 notable species were recorded, 11 of which were considered to be breeding or probably breeding, most were of no particular significance within a London context.
- 4.4.33 The notable species recorded were Schedule 1 species (peregrine), six BoCC red list species and nine amber list species.
- Of some interest were the little grebe and pochard sightings, although neither was confirmed to be breeding, and common tern seen using the site but not considered to breed within it. The usual waterfowl assemblage expected on canals in the inner London area, including mute swan, tufted duck, mallard, coot and moorhen was present.
- 4.4.35 A yellow wagtail was recorded on passage migration and does not breed on site.
- 4.4.36 A peregrine was recorded over the site on June 24th, but there is no suggestion that this was anything other than an overflying bird.
- 4.4.37 The notable species breeding along the canal are generally common and widespread breeding birds adapted to living in a built-up environment but notable because their overall breeding populations in Great Britain have decreased markedly in recent decades. However, most are to be expected in this area and none has any great conservation significance within a London context.

#### Wormwood Scrubs

4.4.38 Wormwood Scrubs comprises a mix of habitats dominated by large areas of grassland, some of which is mown amenity grassland including sports pitches and some of which

is managed as rough grassland with scattered scrub. The site is bordered by a railway embankment to the north and Wormwood Scrubs prison to the south plus a mixture of residential housing and transport infrastructure. The vegetation bordering the site is a mixture of mature trees and scrub, the scrub being particularly extensive along the railway line.

- 4.4.39 A total of 53 bird species were recorded in this survey area during the 2013 breeding season. Of these, 26 species were considered to be breeding with a further five species probably doing so and four more possibly breeding. The remainder were either migrants or flying over the area but not considered to be breeding within it.
- 4.4.40 A total of 24 notable species were recorded, 13 of which were considered to be definitely or possibly breeding. The notable species recorded were all BoCC red or amber listed, comprising seven red listed species and 17 amber listed species.
- The notable species breeding in the Wormwood Scrubs area are generally common and widespread breeding birds; they are notable because their overall breeding populations in Great Britain have decreased markedly in recent decades. The main interest features are largely associated with areas of rough grassland and scrub at the western end of the grassed areas. These include several pairs of meadow pipit, whitethroat and lesser whitethroat, linnet, bullfinch and possibly reed bunting. Kestrels regularly hunt over the rough grassland and may breed within the site, although this was not confirmed.
- 4.4.42 Most of the populations of the notable species breeding within the survey area do not have any particular conservation significance. However, the breeding numbers of meadow pipit are of borough significance. This species is a scarce breeding species in central London. In addition the general breeding assemblage in the areas of rough grassland and scrub are locally significant.

## Little Wormwood Scrubs and Railway Embankment

- 4.4.43 Little Wormwood Scrubs and the adjacent railway embankment comprises a mix of habitats including an area of grassland, some of which is mown amenity grassland and some of which is managed as rough grassland with some dense patches of scrub. The site is bordered by Wormwood Scrubs to the west and a large amount of residential housing and transport infrastructure on other sides. The vegetation bordering the site is a mixture of mature trees and scrub, the scrub being particularly extensive along the railway line embankment and in the middle of Little Wormwood Scrubs.
- 4.4.44 A total of 38 bird species were recorded in this survey area during the 2013 breeding season. Of these, 18 species were considered to be breeding with a further five species probably doing so and five more possibly breeding. The remainder were either migrants or flying over the area but not considered to be breeding within it.
- 4.4.45 A total of 16 notable species were recorded, only seven of which were considered to be definitely or possibly breeding.
- 4.4.46 Of local interest are several pairs of whitethroat, whilst chiffchaffs and blackcaps breed in the more mature woodland areas within the site.

The notable species breeding in the Little Wormwood Scrubs area are all common and widespread breeding birds; they are notable because their overall breeding populations in Great Britain have decreased markedly in recent decades. None have any great conservation significance within a London context.

### St Mary's RC Cemetery

- 4.4.48 The habitat at St. Mary's RC Cemetery is a mixture of open grassland interspersed with gravestones. Some of the grassland is closely managed but there are other areas of rough grassland and scattered mature trees and shrubs. There is less tree cover than the adjacent Kensal Green Cemetery giving the area a slightly more open feel. There are also some cemetery buildings on site, and the site is bounded by a railway line to the north, the Grand Union Canal to the south and industrial and commercial buildings and residential housing to the west.
- 4.4.49 A total of 36 bird species were recorded in this survey area during the 2013 breeding season. Of these, 17 species were considered to be breeding with a further seven species probably doing so and six more possibly breeding. The remainder were either migrants or involved birds flying over the area but not considered to be breeding within it.
- 4.4.50 Amongst the 16 notable species recorded were ten amber listed BoCC species including black redstart, a schedule 1 species, and six BoCC red list species..
- 4.4.51 Most of the notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat and that are adapted to living in a built-up environment. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades but they do not in themselves confer any particular significance to the site. In an inner London context the population of linnets is of interest as is the record of meadow pipits, although it was not established that the latter species breeds on site.
- The breeding assemblage within the survey area has no particular conservation significance with the one important exception of black redstart. A territorial male was present all summer in the western edge of the site, although it was not established whether breeding actually took place. This is a nationally rare breeding species so any site holding a territory of this species is of significance.

## Kensal Green Cemetery

- The habitat at Kensal Green Cemetery is a mixture of mature trees and open grassland interspersed with gravestones. Most of the grassland is closely managed but there are some areas of rougher grassland and scattered mature trees and shrubs. There is more tree cover than the adjacent St. Mary's RC Cemetery giving the area a slightly more wooded feel. There are also some cemetery buildings on site, and the site is bounded by roads and residential housing to the north and the Grand Union Canal to the south.
- 4.4.54 A total of 41 bird species were recorded in this survey area during the 2013 breeding season. Of these, 26 species were considered to be breeding with a further two species probably doing so and two more possibly breeding. The remainder were either

- migrants or involved birds flying over the area but not considered to be breeding within it.
- 4.4.55 The notable species were peregrine, a Schedule 1 species, and three red list species and nine amber list species.
- 4.4.56 Species of local interest were sparrowhawk, kestrel, goldcrest, coal tit and nuthatch. The peregrine was recorded flying over the site on 20 May 2013. There is no suggestion that this was anything other than an overflying bird.
- 4.4.57 The notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat and that are adapted to living in a built-up environment. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades but they do not in themselves confer any particular significance to the site.

### Black Redstart Surveys

- 4.4.58 As detailed above, a territorial male black redstart was present all summer in the western edge of St. Mary's RC Cemetery. While no evidence of breeding was recorded, the presence of an individual holding territory represents more than 1% of the national population of this species.
- 4.4.59 No other black redstarts were recorded during the surveys in this section of the Proposed Scheme. However, further areas of habitat which are more suitable for black redstarts, including the rail land and light industrial areas were not surveyed due to access restrictions and it is considered that black redstart could be present within these areas.
- 4.4.60 No black redstarts were located during any of the surveys undertaken along PRoW in CFA4.

#### Desk Study

- A record of black redstart at Wormwood Scrubs has been found during the desk study and this was obtained from the March 2009 report on The Urban Birder's website<sup>10</sup>. The record comprised a male seen briefly on Lester's Embankment on the 24 March 2009. This is considered to be a casual record and there was no reported evidence of breeding. Further records of black redstart at Wormwood Scrubs and at the Old Oak Sidings have been obtained from GiGL and again no evidence of breeding was reported.
- 4.4.62 Desk study data from the Wormwood Scrubs Park SBI citation added whitethroat and willow warbler as breeding species to those recorded by field survey. Other species found in desk study records but not during field survey were: Mediterranean gull (Larus melanocephalus), Dartford warbler (Sylvia undata), peregrine, hobby, greenshank (Tringa nebularia), marsh harrier (Circus aeruginosus), honey-buzzard (Pernis apivorus), barn owl (Tyto alba), brambling (Fringilla montifringilla), whimbrel (Numenius phaeopus), common tern, spotted flycatcher (Muscicapa striata), tree pipit (Anthus

<sup>&</sup>lt;sup>10</sup> Urban Birder Website, http://www.theurbanbirder.com/urban-birding/wormwood-scrubs-march-2009/, accessed throughout 2012 and 2013

trivialis), turtle dove (Streptopelia turtur), wryneck (Jynx torquilla), curlew (Numenius arquata), ring ouzel (Turdus torquatus), yellowhammer (Emberiza citrinella), woodlark (Lullula arborea), reed bunting (Emberiza schoeniclus), lapwing (Vanellus vanellus) and cuckoo. Breeding status of these species could not be confirmed but most appear to be casual records.

- 4.4.63 Whitethroat has been recorded in the citation for Little Wormwood Scrubs Park SLI, although no evidence of breeding was reported.
- 4.4.64 To the east of Old Oak Common there is a casual record of a black-winged stilt (*Himantopus himantopus*) flying south. There was no evidence of breeding.
- 4.4.65 At Queen's Park in West Kilburn which is situated approximately 110m north of the land required for the Proposed Scheme at its closest point, there are records of hobby and house sparrow. However, no evidence of breeding was reported.
- 4.4.66 At Kensal Green Cemetery the SMI citation indicates spotted flycatcher has been recorded as breeding, and this species was not found during field surveys. Firecrest (*Regulus ignicapilla*), house sparrow and cuckoo have also been recorded at the site although no evidence of breeding was reported.
- 4.4.67 At Athlone Gardens (approximately 55m south of the land required for the construction of the Proposed Scheme at its closest point) house sparrow has been recorded. No evidence of breeding was reported.
- 4.4.68 At Emslie Horniman Pleasance in Kensal Town (approximately 6om south of the land required for the construction of the Proposed Scheme) house sparrow has been recorded. No evidence of breeding was reported.
- 4.4.69 At Wilberforce Primary School (situated adjacent to the land required for the construction of the Proposed Scheme) house sparrow has been recorded. No evidence of breeding was reported.
- 4.4.70 At St Augustine's C of E High School (approximately 94m northwest of the land required for the construction of the Proposed Scheme) house sparrow has been recorded. No evidence of breeding was reported.

#### Areas Not Accessible for Field Survey

## Network Rail Land at Old Oak Common

- 4.4.71 Given that this area was not accessible for survey, desk study information has been used to provide an indication of the breeding bird interest at the site. The northern part of this area is designated as Old Oak Common Sidings Birch Wood SBI Grade I. This SBI comprises a small birch woodland, which has developed on former railway sidings beside the Grand Union Canal. The site is not accessible to the public and is owned by Network Rail.
- 4.4.72 The site includes scrub and trees that could afford nesting opportunities for birds during the breeding season. The desk study highlighted records of black redstart to the immediate north of the SBI.

#### Acton Railsides SBI Grade I

- 4.4.73 Given that this SBI was not accessible for survey, desk study information has been used to provide an indication of the breeding bird interest at the site. The rail cuttings within this SBI are particularly wide and provide varied semi-natural wildlife corridors. Habitats present include secondary woodland, scrub, semi-improved neutral grassland, scattered trees, herbs and tall ruderals and bare ground. The site is not accessible to the public and is owned by Network Rail.
- 4.4.74 The habitat mosaic at the SBI provides potentially suitable breeding habitat for birds.

### CFA<sub>5</sub>

## Network Rail land within 25om of Hanger Lane vent shaft main compound, Ealing

- The habitat in this highly built up area is a typical urban mix of housing, retail, commercial, industrial and transport infrastructure, including rail, with some limited green spaces and gardens. There are some areas of rough ground to the west of the site adjacent to the River Brent, a small stretch of which flows through the survey area.
- 4.4.76 A total of 33 bird species were recorded in this survey area during the 2013 breeding season. Of these, 18 species were considered to be breeding with a further six species probably doing so. The remainder were either migrants or flying over the area but not considered to be breeding within it.
- 4.4.77 Most of the notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. Of local interest was a pair of grey wagtail breeding around the River Brent to the west of the site. A pair of linnets and a singing lesser whitethroat was of interest in a local context.
- 4.4.78 None of the populations of the species breeding within the survey area has any particular conservation significance. The site is considered to have no significant conservation importance for its breeding bird community.

# Network Rail land within 25om of Greenpark Way vent shaft main compound, Ealing

- The habitat in this highly built up area is a typical urban mix of housing, retail, commercial, industrial and transport infrastructure, including rail, but with some limited green spaces and waste areas, plus a small section of Perivale Wood Nature Reserve on the east edge of the site.
- 4.4.80 A total of 39 bird species were recorded in this survey area during the 2013 breeding season. Of these, 25 species were considered to be breeding with a further 11 species probably doing so. The remainder were either migrants or using/flying over the area but not considered to be breeding within it.
- 4.4.81 All of the notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. The most noteworthy of them are kestrel, whitethroat and linnet, whilst several pairs of herring gulls and lesser black-

- backed gulls are breeding on the flat roofs of the large factories/retail parks to the north of the railway line.
- 4.4.82 None of the populations of the species breeding within the survey area has any particular conservation significance.

# Network Rail land within 25om of Mandeville Road, Northolt Shaft Location, Ealing

- 4.4.83 The habitat in this built up area is a mix of residential housing, retail, commercial offices and transport infrastructure, including rail, but with some limited green spaces. There is a mixture of gardens, mature trees, shrubs and scrub along the railway line.
- 4.4.84 A total of 39 bird species were recorded in this survey area during the 2013 breeding season. Of these, 26 species were considered to be breeding with a further seven species probably doing so. The remainder were either migrants or flying over the area but not considered to be breeding within it.
- All of the five BoCC red and nine BoCC amber listed notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. However, the breeding bird community in the hedgerows and scrub along the railway line showed some diversity and is of local interest. The most noteworthy of the species recorded on site are whitethroat, linnet and bullfinch, whilst several pairs of herring gulls and lesser black-backed gulls breed on the flat roofs of the large factories/retail parks in or adjacent to the survey area to the south of the railway line.
- 4.4.86 None of the populations of the species breeding within the survey area has any particular conservation significance.

#### London Grand Union Canal

4.4.87 The results of this linear section of the Grand Union Canal alongside Old Oak Common area are given in CFA4.

#### Bird Records within CFA5

- The desk study returned records of several Schedule 1 and Annex 1 species within the CFA although it is not known if they are breeding at the locations at which they were recorded. A hobby has been recorded on Horsenden Lane South which is approximately 193m northeast of the land required for the construction of the Proposed Scheme at its closest point. A short-eared owl (Asio flammeus) has been recorded over a residential property on Townson Avenue which borders network rail land and is adjacent to the land required for the construction o Proposed Scheme. There is a record of a peregrine at a residential property on Conway Street, close to Perivale Wood and approximately 20m south of the land required for the construction of the Proposed Scheme.
- 4.4.89 The desk study identified a record of a reed bunting at an allotment garden adjacent to London's Greater Union Canal, near Carr Road.

#### CFA6

#### Gatemead Farm

- 4.4.90 The habitat in this very small plot of land comprises one residential house and its medium sized garden. The house is bordered to its north and west by farm fields.
- Apart from a hobby seen using the area on one occasion there were few birds recorded. The hobby is likely to be one of a pair nesting to the west of the site, and there is no suggestion it was breeding within this small site.
- 4.4.92 A total of 17 bird species were recorded in this survey area during the 2013 breeding season. Of these, three species were considered to be breeding with a further three species probably doing so. The remainder were either migrants or using and/or flying over the area but not considered to be breeding within it.
- 4.4.93 Three notable species were recorded at the site comprising a Schedule 1 species, hobby, and two BoCC amber list species, green woodpecker and dunnock. The breeding bird community comprised common and widespread species adapted to living in a semi-rural environment. None of the populations of the species breeding within the survey area has any particular conservation significance.

## Land on the north-west side of Breakspear Road South

- 4.4.94 The habitat in this semi-rural/rural area comprises two fields which are currently used for horse and cattle grazing. It is largely bordered by hedgerows, but also with a line of trees abutting a busy road to the south east and a public footpath with mature trees and scrub to the south west.
- 4.4.95 A total of 46 bird species were recorded in this survey area during the 2013 breeding season. Of these, 19 species were considered to be breeding with a further eight species probably and six species possibly doing so. The remainder were either migrants or using and/or flying over the area but not considered to be breeding within it.
- Twenty notable species were recorded consisting of two Schedule 1 species (red kite and hobby), four red list species and 13 amber list species. The most significant notable species recorded were red kite, hobby, kestrel and cuckoo. Both the red kite and hobby were flying over the area and not considered to be breeding within it. However, it is thought that the hobbies are breeding in an adjacent survey area either at Copthall Covert or Newyears Green Covert. The wider area, including these fields, will form part of the species' feeding territory. Three kestrels seen together in June were no doubt local breeding birds, although they are more likely to have bred adjacent to, rather than in the survey area. The cuckoo was only seen once and assumed to have been a migrant.
- 4.4.97 Other than those species the breeding bird community comprised common and widespread species adapted to living in a semi-rural or rural environment.

## Land on the East side of Breakspear Road South

4.4.98 The habitat in this semi-rural area comprises a rough grassland field which is bounded by trees and a busy road to the west and a tree/scrub-lined stream (the River Pinn) to

- the east behind which is residential housing. To the north is a railway line embankment with scrub and to the south more residential housing.
- 4.4.99 Although the exact survey site was small it was considered that any impact from works in the field was likely to impinge on the stream, thus the survey area was extended to include this section of habitat.
- 4.4.100 A total of 47 bird species were recorded in this survey area during the 2013 breeding season. Of these, 24 species were considered to be breeding with a further four species probably and seven species possibly doing so. The remainder were either migrants or using and/or flying over the area but not considered to be breeding within it.
- 4.4.101 Sixteen notable species were recorded, three of which are Schedule 1 (red kite, kingfisher and hobby). Four are BoCC red listed and 12 are amber listed. .
- The most significant notable species recorded were red kite, hobby, kingfisher and grey wagtail. Both the red kite and hobby were flying over the area and not considered to be breeding within it. However, it is thought that the hobbies are breeding in an adjacent survey area. The wider area, including this section, will form part of the species' feeding territory.
- 4.4.103 The most significant breeding record involved a pair of kingfishers which nested just to the south of the survey area but whose breeding territory would have included the whole of the stream on the east side of the site. Grey wagtail was recorded in March but not subsequently and breeding could not be confirmed, although the site is suitable.
- 4.4.104 All of the other notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades. The most noteworthy of them are whitethroat and bullfinch.
- 4.4.105 None of the populations of the species breeding within the survey area has any particular conservation significance.

#### Oak Farm

- 4.4.106 The habitat in this area comprises a large farmhouse with outbuildings, some small fields which are bounded by trees and scrub. These fields are used for horse and cattle grazing. The eastern boundary is formed by a tree/scrub-lined stream (the River Pinn) whilst to the west is a line of trees and a busy road. To the south is a railway line embankment with scrub and to the north some residential housing and outbuildings.
- 4.4.107 A total of 44 bird species were recorded in this survey area during the 2013 breeding season. Of these, 17 species were considered to be breeding with a further seven species probably doing so and ten more possibly breeding. The remainder were either migrants or flying over the area but not considered to be breeding within it.
- 4.4.108 There were 16 notable species recorded, including red kite and hobby (Schedule 1) and little egret (Annex 1), and a further three BoCC red listed and 12 amber listed species.

- 4.4.109 The most significant breeding record involved grey wagtails. Several sightings of a single bird suggested a territory along the stream on the east side of the site, although the actual nest site was not found.
- 4.4.110 Single red kite, hobby and little egret were recorded overflying the site but were not considered to be breeding within it.
- All of the other notable species probably or possibly breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades. The most noteworthy of them were swallow, whitethroat and bullfinch.
- 4.4.112 None of the populations of the notable species breeding within the survey area has any particular conservation significance.

## Ruislip Golf Course from Public Rights of Way

- The habitat in this area comprises a golf course interspersed with trees and shrubs. There are a few small ponds within the survey area. The golf course is bounded by trees and a road to the east and a tree/scrub-lined stream (the River Pinn) to the west. To the south is a railway line embankment with trees and scrub and to the north is residential housing.
- 4.4.114 A total of 55 bird species were recorded in this survey area during the 2013 breeding season. Of these, 27 species were considered to be breeding with a further six species probably doing so and ten more possibly breeding. The remainder were either migrants or using/flying over the area but not considered to be breeding within it.
- 4.4.115 There were 22 notable species recorded at the site consisting of seven red listed BoCC species and 15 amber listed species.
- 4.4.116 The most significant species present and breeding/possibly breeding during the breeding season were kestrel, sparrowhawk, buzzard, cuckoo, willow warbler and grey wagtail.
- 4.4.117 Two little egrets were seen using the site on one visit but were not considered to be breeding within it. All of the other notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades. The most noteworthy of them are whitethroat and bullfinch.
- 4.4.118 None of the populations of the species breeding within the survey area has any particular conservation significance.

#### Mad Field Covert

- 4.4.119 The habitat in this area comprises an area of mature woodland which is bounded by playing fields to the north and by residential housing around the remainder of the site.
- 4.4.120 A total of 37 bird species were recorded in this survey area during the 2013 breeding season. Of these, 17 species were considered to be breeding with a further eight

- species probably doing so and five more possibly breeding. The remainder were either migrants or using/flying over the area but not considered to be breeding within it.
- 4.4.121 In terms of notable species, nine were recorded at the site consisting of four red listed BoCC species and five amber listed species.
- 4.4.122 The most significant breeding record involved a single sighting of a marsh tit in April. Although there was only one sighting this can be an elusive species in the breeding season and it is possible that the species bred or attempted to breed at the site.
- All of the other notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades. The breeding bird assemblage noted during the breeding season included goldcrest, coal tit, chiffchaff, garden warbler, nuthatch and treecreeper.
- 4.4.124 None of the populations of the species breeding within the survey area has any particular conservation significance.

#### Copthall Farm

- 4.4.125 The habitat in this area comprises a farm currently used for cattle, with all fields down to pasture. The fields are interspersed with close cut hedges and some isolated mature trees. There are farm buildings in the east of the site, which is bounded by roads and residential housing to the west and east and by Copthall Covert and other farmland to the north.
- 4.4.126 A total of 50 bird species were recorded in this survey area during the 2013 breeding season. Of these, 24 species were considered to be breeding with a further six species probably doing so and seven more possibly breeding. The remainder were either migrants or using/flying over the area but not considered to be breeding within it.
- 4.4.127 A total of 23 notable species were recorded at the site. These consisted of two Schedule 1 species, red kite and hobby, with red kite also being an amber listed BoCC species; eight red listed species and a further 14 amber listed species.
- 4.4.128 The most significant breeding record involved a pair of hobbies which was present in the area during the summer and which was probably breeding to the north of the survey area. The exact location of the nest is not known. The hobbies were noted either on site or flying towards the site on several occasions during the breeding season and it is clear that a pair was resident in the area.
- The other most notable species seen were red kite, kestrel, and lapwing. Red kite is a potential colonist to this site, especially around Copthall Covert, but the only sightings involved flyover birds and there were no indications of breeding.
- 4.4.130 Four lapwings were present on one day in mid-May, one of which was seen displaying. This is normally an early breeding species and is conspicuous when doing so, so it seems likely that these birds were passing through the area, although a breeding attempt cannot be ruled out.
- 4.4.131 Common tern was recorded flying over the site but is not considered to breed on site.

- All of the other notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades. The most noteworthy of them are kestrel, swallow, whitethroat and bullfinch.
- 4.4.133 None of the populations of the species breeding within the survey area has any particular conservation significance.

## Highway Farm

- 4.4.134 The habitat in this area comprises a Dog's Trust re-homing centre, with associated outbuildings. The buildings are bounded by several fields which are themselves bounded by hedges and trees and a busy road to the west.
- 4.4.135 A total of 39 bird species were recorded in this survey area during the 2013 breeding season. Of these, 19 species were considered to be breeding with a further two species probably doing so and nine more possibly breeding. The remainder were either migrants or using/flying over the area but not considered to be breeding within it.
- 4.4.136 A total of 12 notable species were recorded at the site consisting of five red listed species and seven amber listed species.
- 4.4.137 The most significant breeding record involved several pairs of swallows which nested on the buildings and outbuildings of the Dog's Trust re-homing centre.
- 4.4.138 A raven was recorded from the site and was seen flying over New Years Green Covert. Raven is a scarce species in this area but was not considered to be breeding within either site.
- 4.4.139 All of the other notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades. The most noteworthy of them are kestrel, skylark, whitethroat and linnet.
- 4.4.140 None of the populations of the species breeding within the survey area has any particular conservation significance.

# Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon

- 4.4.141 Network Rail land within 250m of South Ruislip Station vent shaft main compound, Hillingdon The habitat in this highly built up area is a typical urban mix of housing, retail, commercial, industrial and transport infrastructure, including rail, with some limited green spaces and gardens.
- 4.4.142 A total of 34 bird species were recorded in this survey area during the 2013 breeding season. Of these, 18 species were considered to be breeding with a further seven species probably doing so and three more possibly breeding. The remainder were either migrants or flying over the area but not considered to be breeding within it.

- 4.4.143 A total of 13 notable species were recorded at the site comprising three red listed BoCC species and ten amber listed species.
- 4.4.144 Most of the notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades.
- 4.4.145 The most noteworthy record involved several sightings of grey wagtails, and it is probable that a pair was breeding in the industrial area on the north side of the railway line. Single kestrels were recorded on three occasions and might possibly breed within the survey area.
- 4.4.146 None of the populations of the species breeding within the survey area has any particular conservation significance.
  - Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon
- 4.4.147 Network Rail land between Ickenham High Road and Breakspear Road South, Hillingdon The habitat in this linear site comprises a railway line and cutting with some dense trees and scrub which is bounded by a farm and golf course to the north and by fields, playing fields and residential housing to the south. The eastern end of the area is more built up and includes West Ruislip station and some commercial/residential developments.
- 4.4.148 A total of 56 bird species were recorded in this survey area during the 2013 breeding season. Of these, 29 species were considered to be breeding with a further ten species probably doing so and two more possibly breeding. The remainder were either migrants or using/flying over the area but not considered to be breeding within it.
- 4.4.149 A total of 23 notable species were recorded at the site. These being two Schedule 1 species, red kite and hobby, with red kite also being an amber listed BoCC species; eightred listed species and a further 13 amber listed species.
- 4.4.150 The most significant species recorded during the breeding season were cuckoo, garden warbler, bullfinch, linnet and yellowhammer and these species were considered to be probably or possibly breeding on the site. There was a diverse assemblage of woodland/scrub species breeding along the railway line.
- 4.4.151 Red kite, hobby and lapwing were recorded overflying the site but were not considered to be breeding within it.
- 4.4.152 All of the other notable species breeding on this site are common and widespread breeding birds that would be expected in this type of habitat. They are notable in that their breeding populations have declined significantly in Great Britain in recent decades.
- 4.4.153 None of the populations of the species breeding within the survey area has any particular conservation significance.

## Network Rail land between Breakspear Road South and Harvil Road, Hillingdon

- 4.4.154 Network Rail land between Breakspear Road South and Harvil Road, Hillingdon The principal habitat in this section comprises a railway cutting whose embanked sides include a mixture of mature woodland, hedgerows, grassland and scrub. In addition the site is bounded by farmland with hedgerows, open fields and mature trees and some farm buildings plus some residential housing.
- 4.4.155 A total of 52 bird species were recorded in this survey area during the 2013 breeding season. Of these, 26 species were considered to be breeding with a further seven species probably doing so and four more possibly breeding. The remainder were either migrants or using/flying over the area but not considered to be breeding within it.
- 4.4.156 A total of 18 notable species were recorded at the site consisting of red kite ( Schedule 1 species and BoCC amber listed) five red listed species and a further 12 amber listed species.
- 4.4.157 A number of notable species were recorded during the survey period. Red kite was recorded as flying over the site and was not considered to be breeding in the area, although it is a potential colonist Cuckoo was recorded on one date but not thereafter so is considered to have been a passage migrant.
- 4.4.158 The main feature of the site was the breeding bird community in the woods and scrub along the railway embankment, particularly at the west end of the site. Although no particularly rare species were recorded the breeding assemblage included five pairs of garden warblers, bullfinch, linnet, whitethroat, song thrush and buzzards may also have bred.

## Barn Owl Field Survey

- 4.4.159 Nine land parcels of various sizes were prioritised for survey where satellite imaging indicated habitats present may be potentially suited to barn owls.
- 4.4.160 The field surveys did not record barn owl breeding in this section of the Proposed Scheme, however, a total of seven PNS were recorded within three of the nine land parcels, all in CFA6. These were Highway Farm (1x PNS Medium Probability), Copthall Farm (4x PNS Medium Probability) and land SW of Bayhurst Wood (1x High Probability and 1x Low Probability). Four of these PNS fall within the Proposed Scheme boundary.
- 4.4.161 In terms of foraging habitat for barn owl it was identified as Low in all land parcels with the exception of land south-west of Bayhurst Wood and fields to the east side of Breakspear Road South where it was described as Medium value. In addition land adjacent to the PRoW north-west of Highway Farm appears to be of significantly greater value both in terms of potential nest sites and foraging habitat.
- 4.4.162 On the basis of local knowledge it is estimated that between 2 and 4 pairs of barn owl may breed in this area during a favourable year. This is because occasional breeding has been recorded during the last ten years just west of Ruislip on the boundary of

HS2 C251/252 in the parishes of Denham and Harefield where it is estimated that there is a maximum of 2-4 breeding pairs in some years. Birds occupying this area are therefore an extension of the Colne Valley population during periods of expansion. (*in litt.* C. Shawyer, 12 August 2013).

4.4.163 The barn owl population along this section of the Proposed Scheme is likely to be a declining population. This is due to breeding being intermittent as a result of the suboptimal habitat present along this section, with only a few enclaves of suitable remnant habitat remaining (*Pers. comm*, with C. Shawyer, 11 August 2013).

## Desk Study of Areas Not Accessible for Field Survey

#### **Ruislip Woods Site of Special Scientific Interest**

Ruislip Woods Site of Special Scientific Interest (SSSI) is an area of ancient seminatural woodland, and lies in four major blocks, known as Bayhurst, Mad Bess, Copse and Park Woods. The woods, surrounding fields and waterbodies provide suitable habitat for breeding birds. Of this woodland complex Bayhurst wood is the closest to the land required for the construction of the Proposed Scheme. Desk study data indicates that Ruislip Woods has a diverse assemblage of breeding birds including a number of notable species such as hawfinch, lesser spotted woodpecker, wood warbler, cuckoo, willow tit, woodcock, green woodpecker and great spotted woodpecker.

#### **New Years Green Covert**

4.4.165 New Years Green Covert is a Grade 1 SBI and is a woodland with a variety of woodland species. The site provides suitable habitat for breeding birds although no specific records have been found.

## 5 Wintering and Passage Birds

## 5.1 Introduction

5.1.1 This section of the appendix presents details of baseline information relating to wintering and passage birds for the section of the Proposed Scheme that will pass through CFA 1 to 6 inclusive.

## 5.2 Methodology

- 5.2.1 Details of the standard methodology utilised for wintering and passage bird surveys are provided in the Technical Note HS2 Ecological Surveys: Field Survey Methods and Standards which is included as an appendix to Volume 1.
- 5.2.2 Desk study records relating to wintering birds were obtained from the following sources:
  - Greenspace Information for Greater London (GiGL)<sup>11</sup>;
  - The British Trust for Ornithology (BTO);
  - Royal Society for the Protection of Birds (RSPB);
  - Natural England's website<sup>12</sup>; and
  - London Bird Club Wiki website<sup>13</sup>.
- Table 15 summarises those locations where survey for wintering/passage birds was undertaken.
- 5.2.4 No winter bird surveys were undertaken in CFA1. Regent's Park was not subject to field surveys, as previously it did not fall within the scope of survey, but does now due to scheme design changes which occurred after the end of survey season. Desk study data is used and a precautionary approach has been followed drawing on this information.
- 5.2.5 No wintering bird surveys were undertaken in CFAs2-3 as no significant suitable habitat was recorded.
- 5.2.6 This information can be cross referenced with that provided in accompanying map series EC-09.

Table 15: Summary of wintering/passage bird field surveys undertaken in CFA 4 to 6 inclusive

Ecology survey	urvey Survey site name OS grid reference		Habitat types included in	Survey	CFA
code	and location		survey	date(s)	
010-WB1-008001	Wormwood	TQ 221 817	Grassland, comprising mown	30 January	4
	Scrubs	(central grid ref)	amenity grassland and rough	2013	
			grassland with scattered scrub.		

<sup>11</sup> http://www.gigl.org.uk/planning/

<sup>&</sup>lt;sup>12</sup> Natural England Website, <a href="http://www.sssi.naturalengland.org.uk/Special/sssi/sssi">http://www.sssi.naturalengland.org.uk/Special/sssi/sssi</a> details.cfm?sssi id=1003633, Accessed throughout 20112 and 2013

<sup>13</sup> London Brid Club Wiki, http://londonbirders.wikia.com/wiki/Ruislip Woods NNR and Ruislip Lido, Accessed throughout 2012 and 2013

Ecology survey	Survey site name	OS grid reference	Habitat types included in	Survey	CFA
code	and location		survey	date(s)	
			The vegetation bordering the site is a mixture of mature trees and scrub, the scrub being particularly extensive along the railway line.	21 February 2013	
		TQ 159 837 (central grid ref)	Woodland and grassland.	23 November 2012 13 December 2012 15 January 2013 14 February 2013	5
010-WB1-019001	Along Public Rights of Way (PRoW) through Islip Manor Nature Reserve	TQ 119 843 (central grid ref)	Arable land, grassland and hedgerows.	30 January 2013 22 February 2013	5
010-WB1-019002	Along PRoW through Lord Halsbury Memorial Playing Field	TQ 120 848 (central grid ref)	Amenity grassland, arable land and hedgerows.	30 January 2013 22 February 2013	5
010-WB1-024003	Along PRoW around West Ruislip at Breakspear Road South	TQ 072 873 (central grid ref)	Mixed suburban/farmland habitat with small watercourses	29-30 January 2013 20/22 February 2013	6
010-WB1-024002	Along PRoW through Ruislip golf course	TQ 081 871 (central grid ref)	Amenity grassland, trees and shrubs. There are a few small ponds in the site and a tree/scrub-lined stream (the River Pinn) borders the west of the site.	29 January 2013 20 February 2013	6
010-WB1-024001	Along PRoW through Copthall farm	TQ 065 871 (central grid ref)	Deciduous woodland, hedgerows, agricultural land	30 January 2013 20 February 2013	6

## 5.3 Deviations, constraints and limitations

5.3.1 The number of species recorded during the January and February surveys was unexpectedly low. The very cold weather in January and February may have affected the number and range of species recorded. In addition, the results from surveys restricted to PRoW only will have been affected, with a likely reduction in the range

- and number of species recorded. The discussion follows a precautionary approach to take into account these limitations.
- The late start to surveys at Wormwood Scrubs and the sites surveyed in CFA6, with the first survey not taking place until late January 2013 is considered to have affected the number of species recorded. Where only two visits were possible this was fewer than the number recommended in the Field Methods and Standards Manual.
- Table 16 identifies those survey locations which were scoped as requiring wintering/passage bird survey, but access was not forthcoming in time to allow field survey during the available 2012/2013 survey window.

Table 16: Summary of wintering/passage bird survey locations where no access available for survey in CFA 1 to 6 inclusive

Survey site name	Urvey site name Site name and location		Description of proposed survey location	CFA
Regent's Park	South East corner of Regent's Park adjacent to Outer Circle	TQ 285 835	mature trees and amenity grassland	1
Land south of Carr Road, Ealing	Land south of Carr Road, Ealing	TQ 140 842	Reedbed and ditch system	5
Bayhurst Wood and surrounding fields	North-west of Newyears Green	TQ 067 888	Ancient semi-natural woodland	6

## 5.4 Baseline

#### CFA<sub>1</sub>

#### Regent's Park

The desk study indicated that Regent's Park is used by a number of wintering birds including lapwing (on the BoCC red list), redwing (Schedule 1 and on the BoCC red list), brambling (Schedule 1), fieldfare (Schedule 1 and on the BoCC red list), firecrest (Schedule 1 and on the BoCC amber list), lesser redpoll (on the BoCC red list), with marsh harrier (Schedule 1 and on the BoCC amber list), merlin (Schedule 1 and on the BoCC amber list) also being recorded. Redwing and fieldfare Schedule 1 and BoCC red status derives from their being rare breeding birds, however they are common winter visitors.

**CFA4** *Wormwood Scrubs* 

 ${\sf Table~17: Records~of~notable~wintering~birds~recorded~within~Wormwood~Scrubs}$ 

Ecology Survey Code	Common name	Latin name	Status	Location	OS Grid Reference	Peak count of individuals across the survey period	Number of surveys during which the species was recorded	Further details
010- WB2- 008001	Kestrel	Falco tinnunculus	Amber list	106m north	TQ 221 817	One on 30 January 2013	One	Amenity grassland with trees and scrub
010- WB2- 008002	Black- headed gull	Chroicocephalus ridibundus	Amber list	106m north	TQ 221 817	240 on 30 January 2013	Two	Loafing/feeding on amenity grassland
010- WB2- 008003	Lesser black- backed gull	Larus fuscus	Amber list	106m north	TQ 221 817	One on 30 January 2013	One	Loafing/feed-ing on amenity grassland
010- WB2- 008004	Herring gull	Larus argentatus	Red list	106m north	TQ 221 817	10 on 30 January 2013	Two	Loafing/feed-ing on amenity grassland
010- WB2- 008005	Green woodpecker	Picus viridis	Amber list	106m north	TQ 221 817	One on 30 January 2013	One	In trees surrounding the amenity grassland
010- WB2- 008006	Starling	Sturnus vulgaris	Red list	106m north	TQ 221 817	47 on 21 February 2013	One	34 flying over, the others using amenity grassland with trees and scrub
010- WB2- 008008	Song thrush	Turdus philomelos	Red list and Section 41	106m north	TQ 221 817	Five on 30 January 2013	Two	Amenity grassland with trees and scrub
010- WB2- 008010	Mistle thrush	Turdus viscivorus	Amber list	106m north	TQ 221 817	One on 30 January 2013	One	Amenity grassland with trees and scrub
010- WB2- 008011	Dunnock	Prunella modularis	Amber list	106m north	TQ 221 817	One on 30 January 2013 and 21 February 2013	Two	Mainly in trees and scrub surrounding the amenity grassland
010- WB2- 008012	House sparrow	Passer domesticus	Red list	106m north	TQ 221 817	15 on 21 February 2013	Two	Mainly in trees and scrub surrounding the amenity grassland

010-	Meadow	Anthus	Amber	106m	TQ 221	One on 21	One	Amenity
WB2-	pipit	pratensis	list	north	817	February		grassland
008013						2013		

- 5.4.2 A total of 30 species were recorded during the two winter survey visits to Wormwood Scrubs. This total was lower than anticipated for the site and may reflect survey constraints.
- 5.4.3 Eleven notable species were recorded, including four red list species (herring gull, starling, song thrush, and house sparrow) and seven amber list species (kestrel, blackheaded gull, lesser black-backed gull, green woodpecker, mistle thrush, dunnock and meadow pipit).
- The number of species recorded (30) falls towards the lower end of the category of local importance.
- The only significant numbers of common species recorded were 700 ring-necked parakeets and 110 carrion crows. The former is present in the general area and may roost overnight on site, whilst large numbers of the latter use the grass areas within Wormwood Scrubs to feed during the day. The main parakeet flock was recorded in the copse at TQ 222 817. The count of carrion crows relates to birds feeding on the grassed areas at Wormwood Scrubs; although a moderately large number this is now an abundant bird within Greater London and the total is of no more than local significance.
- of the national population, it should be noted that this is an introduced species of fairly recent origin in Britain. The presence of more than one per cent of the national population of a bird species at a site would normally confer national importance on the site but, because ring-necked parakeet is a non-native species, this status is not applied. In other respects, the area is considered to have local interest.
- The site can also hold significant numbers of passage migrants in the spring and autumn. Of interest was a significant arrival of passage migrants on April 15th, noted during the breeding birds surveys. This arrival included 13 redstarts and 30 wheatears, plus a number of warblers, including willow warbler and chiffchaff, and some swallows. The count of redstarts is one of the highest ever counts of this species in the London area.

#### **Desk Study**

Reports from November 2012 to February 2013 on The Urban Birder's website <sup>14</sup> for Wormwood Scrubs added records of schedule 1 listed ruff, Mediterranean gull and green sandpiper. The ruff was recorded in January 2013 and was first record of the species at Wormwood Scrubs. The bird was seen to circle low over grassland at the site but eventually flew northwest. A Mediterranean gull was recorded flying past on

<sup>14 ~</sup> Urban Birder Websites, http://londonbirders.wikia.com/wiki/Ruislip Woods NNR and Ruislip Lido, Accessed throughout 2012 and 2013

16 January 2013 and possibly the same bird was seen on the pitches on the 30th January 2013. A green sandpiper was heard calling from the wet grassland towards the embankment at the site on the 28th November 2012. This was the first ever record of this species at the site.

CFA<sub>5</sub>

## Perivale Wood

Table 18 Records of notable wintering birds recorded within Perivale Wood

Ecology Survey Code	Common	Latin name	Status	Location	OS Grid Reference	Peak count of individuals across the survey period	Number of surveys during which the species was recorded	Further details
010- WB2- 015001	Kingfisher	Alcedo atthis	Schedule 1, Annex 1 and Amber list	Flying along canal at the north end of the site at TQ159838	TQ 159 837	One on 23 November 2012	One	
010- WB2- 015002	Starling	Sturnus vulgaris	Red list	In gardens of houses adjacent to the site	TQ 159 837	Three on 13 December 2013	Three	
010- WB2- 015004	Song thrush	Turdus philomelos	Red list	Woods/scrub with some grassed areas	TQ 159 837	One on 23 November 2012 and two on 14 February 2013	Two	
010- WB2- 015006	Mistle thrush	Turdus viscivorus	Amber list	Woods/scrub with some grassed areas	TQ 159 837	Two on 13 December 2012	Two	
010- WB2- 015007	Dunnock	Prunella modularis	Amber list	Woods/scrub with some grassed areas	TQ 159 837	Max five on 14 February 2013	Three	
010- WB2- 015008	Lesser redpoll	Cardvelis cabaret	Red list	Woods/scrub with some grassed areas	TQ 159 837	Two on 23 November 2012 and one on 13 December 2012	Two	
010- WB2- 015009	Bullfinch	Pyrrhula pyrrhula	Amber list	Woods/scrub with some grassed areas	TQ 159 837	One on 13 December 2012	One	

A total of 30 species was recorded during the four winter surveys of Perivale Wood. This is an unexceptional total for this 11ha site, which is mainly oak woodland but including some scrub, grassland and ponds.

- 5.4.10 Kingfisher (Schedule 1) was the only specially protected species recorded. Seven notable species were recorded, including kingfisher. There were three Red list species (starling, song thrush, and lesser redpoll) and four Amber list species (kingfisher, mistle thrush, dunnock and bullfinch).
- The number of species recorded (30) was low. It is possible that some species were missed during the surveys, as a few expected species were not recorded. However, it is considered unlikely that winter species richness would have risen enough to make the site significant in a London or borough context.
- 5.4.12 No species was present in numbers that make the site significant.

### Along PRoW through Islip Manor Nature Reserve

Table 19 Records of notable wintering birds recorded along PRoW through Islip Manor Nature Reserve

Ecology Survey Code	Common name	Latin name	Status	Location	OS Grid Reference	Peak count of individuals across the survey period	Number of surveys during which the species was recorded	Further details
010-WB2- 019001	Starling	Sturnus vulgaris	Red list	Grassed areas within site	TQ 119 843	Max 258 on 30/01/2013	Two	Feeding
010-WB2- 019003	Song thrush	Turdus philomelos	Red list	Grassland with scattered trees and scrub	TQ 119 843	One on 30 January 2013	One	
010-WB2- 019004	Mistle thrush	Turdus viscivorus	Amber list	Grassland with scattered trees and scrub	TQ 119 843	Two on 30 January 2013	One	
010-WB2- 019005	Dunnock	Prunella modularis	Amber list	Grassland with scattered trees and scrub	TQ 119 843	Max three on 30 January 2013	Two	
010-WB2- 019006	House sparrow	Passer domesticus	Red list	Grassland with scattered trees and scrub	TQ 119 843	One on 22 February 2013	One	

Along PRoW through Islip Manor Nature Reserve. A total of 17 species were recorded during the two winter survey visits to Islip Manor Nature Reserve. This is a low total for a site of this size (about 25ha) and habitats (wet grassland and scrub). It is likely that the limited coverage, with restricted access and only two visits in January and February, will have affected the number of species recorded.

- 5.4.14 Five notable species were recorded, including three Red list species (starling, song thrush and house sparrow) and two Amber list species (mistle thrush and dunnock).
- 5.4.15 Species diversity was unexceptional and improved survey coverage is unlikely to have significantly altered this.
- 5.4.16 No species was present in numbers that exceeded the level of local importance.

## Along PRoW through Lord Halsbury Memorial Playing Field

Table 20 Records of notable wintering birds recorded along PRoW through Lord Halsbury Memorial Playing Field

Ecology Survey Code	Common name	Latin name	Status	Location	OS Grid Reference	Peak count of individuals across the survey period	Number of surveys during which the species was recorded	Further details
010- WB2- 019007	Mallard	Anas platyryhnchos	Amber list	Flying over but likely to use Yeading Brook along the west side of the site	TQ 120 848	Max nine on 22 February 2013	Two	
010- WB2- 019008	Black- headed gull	Chroicocephalus ridibundus	Amber list	On playing fields	TQ 121 847	Max 25 on 22 February 2013	One	Loafing/feed- ing s
010- WB2- 019009	Common gull	Larus canus	Amber list	On playing fields	TQ 121 847	Max 32 on 30 January 2013	Two	Loafing/feed- ing
010- WB2- 019010	Stock dove	Columba oenas	Amber list	Playing/arable fields with hedgerows/trees	TQ 120 848	Four on 22 February 2013	One	
010- WB2- 019011	Green woodpecker	Picus viridis	Amber list	Playing/arable fields with hedgerows/trees	TQ 120 848	One on 30 January 2013	One	
010- WB2- 019012	Skylark	Alauda arvensis	Red list	Playing/arable fields with hedgerows/trees	TQ 120 848	One on 30 January 2013	One	
010- WB2- 019013	Starling	Sturnus vulgaris	Red list	Playing/arable fields with hedgerows/trees	TQ 120 848	Max 44 on 30 January 2013	Two	
010- WB2- 019016	Dunnock	Prunella modularis	Amber list	Playing/arable fields with hedgerows/trees	TQ 120 848	Max two on 22 February 2013	Two	
010- WB2-	Grey wagtail	Motacilla cinerea	Amber list	Yeading Brook at the western	TQ 115 850	One on 22 February	One	Feeding

Ecology Survey Code	Common name	Latin name	Status	Location	OS Grid Reference	Peak count of individuals across the survey period	Number of surveys during which the species was recorded	Further details
019017				edge of the site		2013		
010- WB2- 019018	Linnet	Carduelis cannabina	Red list	Playing/arable fields with hedgerows/trees	TQ 120 848	One on 22 February 2013	One	

- A total of 21 species was recorded during the two winter survey visits to Lord Halsbury Memorial Playing Fields. This is an unexceptional total which may have been affected by the late start to the survey; the first visit did not take place until late January 2013. More species and higher numbers may have been recorded if more visits.
- 5.4.18 Ten notable species were recorded, including three Red list species (skylark, starling, and linnet) and seven Amber list species (mallard, black-headed gull, common gull, stock dove, green woodpecker, dunnock and grey wagtail).
- The number of species recorded (21) was low and even with additional visits earlier in the season, it is unlikely that winter species richness would have risen above local importance.
- No species was present in numbers that exceeded the level of local importance. The site is considered to be of local importance for wintering birds.

# CFA6 Along PRoW around West Ruislip at Breakspear Road South

Table 21: Records of notable wintering birds recorded along PRoW around West Ruislip at Breakspear Road South

Ecology Survey Code	Common name	Latin name	Status	Location	OS Grid Reference	Peak count of individuals across the survey period	Number of surveys during which the species was recorded	Further details
010- WB2- 024003	Mallard	Anas platyryhnchos	Amber list	Within CCB.	TQ 072 873	Three on 20 February 2013	Two	Mixed suburban/farmland habitat with small watercourses

010- WB2- 024002	Little egret	Egretta garzetta	Annex 1 and Amber List	Within CCB.	TQ 072 873	Two on 20 February 2013	One	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024004	Black- headed gull	Chroicocephalus ridibundus	Amber list	Within CCB	TQ 072 873	Two on both dates	Two	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024005	Herring gull	Larus argentatus	Red list	Within CCB	TQ 072 873	Two on both dates	Two	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024006	Stock dove	Columba oenas	Amber list	Within CCB	TQ 072 873	Four on 20 February 2013	One	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024007	Green woodpecker	Picus viridis	Amber list	Within CCB	TQ 072 873	One on 29 January 2013	One	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024008	Starling	Sturnus vulgaris	Red list	Within CCB	TQ 072 873	11 on 29 January 2013	Two	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024010	Song thrush	Turdus philomelos	Red list	Within CCB	TQ 072 873	Five on 29 January 2013	Two	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024012	Dunnock	Prunella modularis	Amber list and Section 41	Within CCB	TQ 072 873	12 on 20 February 2013	Two	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024013	Lesser redpoll	Cardvelis cabaret	Red list	Within CCB	TQ 072 873	Five on 20 February 2013	One	Mixed suburban/farmland habitat with small watercourses
010- WB2- 024014	Bullfinch	Pyrrhula pyrrhula	Amber list	Within CCB	TQ 072 873	Two on 29 January 2013		Mixed suburban/farmland habitat with small watercourses

- A total of 38 species was recorded at this survey area. Two visits are fewer than the preferred number of visits for a winter bird survey, and it is likely that additional visits would have resulted in more species and higher numbers being recorded. The range and number of species appears low for an area of this size.
- Ten notable species were recorded. Little egret, an Annex 1 Birds Directive species was one of the six BoCC amber listed species present. Four BoCC red list species were also recorded.

- The winter bird community is dominated by species using the hedges and similar habitat but includes some using wetland features and open habitats.
- No unusual flocks were encountered. The numbers and diversity of species recorded may have been affected by survey constraints but even with additional visits and greater access it is unlikely the assemblage would be significant within the London or borough context.

## Along PRoW through Ruislip golf course

Table 22: Records of notable wintering birds recorded along PRoW through Ruislip golf course

Ecology Survey Code	Common name	Latin name	Status	Location	OS Grid Reference	Peak count of individuals across the survey period	Number of surveys during which the species was recorded	Further details
010- WB2- 023003	Mallard	Anas platyryhnchos	Amber list	Within CCB	TQ 081 871	Five on 20 February 2013	Two	Amenity grassland with some trees, scrub and small watercourses
010- WB2- 023002	Red kite	Milvus milvus	Annex 1, Schedule 1 and Amber list	Within CCB	TQ 081 871	Two on 20 February 2013	One	Amenity grassland with some trees, scrub and small watercourses. Flying over although it is likely that the species will utilise the habitat on the site
010- WB2- 023004	Black- headed gull	Chroicocephalus ridibundus	Amber list	Within CCB	TQ 081 871	Six on 20 February 2013	Two	Amenity grassland with some trees, scrub and small watercourses
010- WB2- 023005	Green woodpecker	Picus viridis	Amber list	Within CCB	TQ 081 871	One on both dates	Two	Amenity grassland with some trees, scrub and small watercourses
010- WB2- 023006	Starling	Sturnus vulgaris	Red list	Within CCB	TQ 081 871	Two on 29 January 2013	Two	Amenity grassland with some trees, scrub and small watercourses
010-	Song thrush	Turdus	Red list	Within	TQ 081	Four on 20	Two	Amenity

WB2- 023007		philomelos		CCB	871	February 2013		grassland with some trees, scrub and small watercourses
010- WB2- 023008	Mistle thrush	Turdus viscivorus	Amber list	Within CCB	TQ 081 871	Three on 29 January 2013	One	Amenity grassland with some trees, scrub and small watercourses
010- WB2- 023009	Dunnock	Prunella modularis	Amber list	Within CCB	TQ 081 871	Four on 20 February 2013	Two	Amenity grassland with some trees, scrub and small watercourses
010- WB2- 023010	Lesser redpoll	Cardvelis cabaret	Red list	Within CCB	TQ 081 871	Five on 20 February 2013	One	Amenity grassland with some trees, scrub and small watercourses

- A total of 27 species was recorded during the two winter survey visits along public rights of way through Ruislip golf course. This is a low total for a site of this size, (about 30ha) and with a diversity of habitats, including open grassland (much of the golf course playing areas) plus extensive belts of trees and shrubs and at least two small ponds.
- One specially protected species was recorded: red kite, on both Schedule 1 of WCA 1981 (as amended) and Annex 1 of the Birds Directive, and also an amber listed BoCC species. Two were seen, but they were flying over and not directly using the site. Nine notable species were recorded, three BoCC red list species and six amber list species.
- 5.4.27 Species diversity and numbers were of local importance and despite being lower than anticipated it is unlikely additional coverage would have increased diversity or counts beyond the level of local importance.

## Along PRoW through Copthall farm

Table 23: Records of notable wintering birds recorded along PRoW through Copthall farm

Ecology Survey Code	Common name	Latin name	Status	Location	OS Grid Reference	Peak count of individuals across the survey period	Number of surveys during which the species was recorded	Further details
010- WB2- 025001	Kestrel	Falco tinnunculus	Amber list	Within CCB	TQ 065 871	One on 20 February 2013	One	Wooded copse
010- WB2- 025002	Black- headed gull	Chroicocephalus ridibundus	Amber list	Within CCB	TQ 065 871	Six on 20 February 2013	One	Wooded copse, flying

								over
010- WB2- 025003	Herring gull	Larus argentatus	Red list	Within CCB	TQ 065 871	Two on 20 February 2013	One	Wooded copse, flying over
010- WB2- 025005	Dunnock	Prunella modularis	Amber list	Within CCB	TQ 065 871	One on 30 January 2013	One	Wooded copse
010- WB2- 025006	Meadow pipit	Anthus pratensis	Amber list	Within CCB	TQ 065 871	Two on 20 February 2013	One	Wooded copse
010- WB2- 025007	Bullfinch	Pyrrhula pyrrhula	Amber list	Within CCB	TQ 065 871	Two on 20 February 2013	One	Wooded copse

- 5.4.28 A total of 16 species was recorded during the two winter visits along public rights of way through Copthall farm. This is a small area (about two hectares) of woodland. The PRoW ran to the south of Copthall Covert and did not allow access into the wood.
- Of the 16 species recorded six were notable species of which one was BoCC red listed and five were amber listed species. Numbers and diversity within the assemblage were low. Additional survey effort would have increased the number of species recorded but it is unlikely this would have changed the significance of the assemblage.

#### **Desk Study Areas Not Accessible for Field Survey**

Ruislip Woods Site of Special Scientific Interest

Ruislip Woods Site of Special Scientific Interest (SSSI) is an area of ancient seminatural woodland, and lies in four major blocks, known as Bayhurst, Mad Bess, Copse and Park Woods. The woods, surrounding fields and waterbodies provide suitable habitat for wintering birds. Desk study data indicate most of the wintering interest is around Ruislip Lido, with mallard, tufted duck (Aythya fuligula), pochard (Aythya ferina), teal (Anas crecca), shoveler (Anas clypeata), gadwall (Anas strepera) and wigeon (Anas penelope) present in winter and occasionally smew (Mergus albellus) or goldeneye (Bucephala clangula) also occur. Although the woodland assemblage also includes notable species such as lesser spotted woodpecker, woodcock and possibly hawfinch.

## 6 References

Blackredstarts.org.uk, http://www.blackredstarts.org.uk/ Accessed throughout 2013.

D. R. Lawrence & T R Root, (2012), Nature for the Community, http://natureforthecommunity.co.uk/wp-content/uploads/2012/02/Management-Plan-Adelaide-LNR-2012-17.pdf. Accessed in September 2012.

English Nature, (2001), Great Crested New Mitigation Guidelines, English Nature.

Greenspace Information for Greater London, http://www.gigl.org.uk/ and http://www.gigl.org.uk/planning/. Accessed throughout 2012 and 2013.

London Bird Club Wiki,

http://londonbirders.wikia.com/wiki/Ruislip\_Woods\_NNR\_and\_Ruislip\_Lido, Accessed throughout 2012 and 2013.

Natural England Website,

http://www.sssi.naturalengland.org.uk/Special/sssi/sssi\_details.cfm?sssi\_id=1003633, Accessed throughout 2012 and 2013.

Urban Birder Website, http://www.theurbanbirder.com/urban-birding/wormwood-scrubs-march-2009/, Accessed throughout 2012 and 2013.

Urban Birder Websites,

http://londonbirders.wikia.com/wiki/Ruislip\_Woods\_NNR\_and\_Ruislip\_Lido, Accessed throughout 2012 and 2013.